Construction News

★Denotes work advertised in ENGINEERING NEWS.
✚Denotes contract awarded. The names of bidders awarded contracts are set in CAPITALS.

THE CONTRACTOR AND THE NEW YEAR

The outlook for work in the New Year is far brighter than was thought possible three months ago. There will be quite as much money, or nearly as much, spent for real improvements, where there is actual work of an economically profitable nature to be done, as before, but less will be spent for expensive residences, extravagant railway stations, and public buildings. It is probable that the automobile expenditures will be on a reduced scale, even though the number of cars bought will be greater.

Local financial interests in almost every community east of the Mississippi River and north of the Ohio, will be able to finance the improvements in their immediate vicinity. In many communities outside this restricted area they will likewise be able to, but it is evident that each locality must be more or less self supporting; they will have to secure the coöperation of their own banks and insurance companies, as well as private investors, to take their loans, rather than try to market everything in New York or Chicago.

Financial conditions steadily improve. Some sales of municipal bonds have been made on a basis of 4.30 per cent., which is very attractive. The total sales of municipal bonds in 1914 aggregated more than $450,000,000, an increase of 13 per cent. compared with the previous year, which also established a new high record. Finances of the country are in excellent shape, and the return from municipal bonds is so large that they will be more generally purchased by the class of investors who formerly put their money into less safe propositions.

Prices of supplies are low. A recent advance of a dollar per ton in steel products may mark the turning point from the extreme low level, but it seems unlikely at this time. Cast-iron pipe is undeniably cheap, and much buying has been induced by the low quotations offered. Metals show little change from a month ago, and have not been active. Copper is not low enough to induce buying, and other metals enter into engineering construction in a limited way, that price has no effect.

The railroad rate decision probably granted the carrier as much gain as any of the railway presidents expected. The railways continue to have a hard time of it, because of light traffic, and, perhaps, imprudent expenditures in the past.

The decision handed down the last day of the year by the Appellate Division of the State of New York which declared the Alien Labor clause unconstitutional, was a victory for contractors. Subway work in New York can now go forward.

More attention will be paid to navigation, the building of docks, and work in shipyards, this year than there has been in the last. The policy of extending trade to foreign lands does not affect the contractor much, but it has a sympathetic effect in that anything which increases the business of the country makes for the welfare of the contractor, and in 1915 there will be a gradual though slow expansion of foreign trade.

A loan to the city of Montreal and one of $15,000,000 to Argentina mean much to American manufacturers, and may result in more American capital going into foreign lands.

The leading manufacturers of cement have dropped their quotations to meet the price of the smaller operators. New quotations represent a decline of approximately 16 cents per barrel from those previously current. These, however, were not strictly adhered to.

LABOR

More studied efforts are being made by men accustomed to large operations to take care of the unemployed than ever before. The efforts are resulting in fewer clashes between employees and the police in New York. The announcement that the U. S. Steel Corporation would not reduce wages is taken as an indication that there will be no general wage reduction. A decision was handed down that the Alien Labor law in New York was unconstitutional. This disposes of a case which, for a short time, caused much furor in New York.

CEMENT, LIME AND BRICK

Portland Cement—The leading makers of cement in the East, last week, reduced their price to conform to that of the smaller dealers. This reduction amounts to about 16c. in the East and 8c. in the West. It is believed that the low prices will be short lived. This represents a quotation of 75c. per bbl. in bulk at the mill.

The preliminary estimate of the production of Portland cement in 1914 indicates a falling off of about 4%, the first reduction in output since the industry was established. It is figured that the total production of portland cement in the United States was 88,514,000 bbl. in 1914, compared with 92,097,000 in the previous year. Stocks at the end of 1914 were figured at 12,818,000 bbl., compared with 11,220,000 at the end of 1913. This increase is specially large, amounting to 14%.

The quotations given below do not include the charge of 40 cents made for bags, but are for barrels of cement delivered at the points named, in cloth sacks less their charge:

Chicago	$1.02	Boston	$1.66
Detroit	1.14	Cleveland	1.23
Jersey City	94	Duluth	1.33
New York	1.02	Minneapolis	1.25
St. Paul	1.25	Pittsburgh	1.00

Lime—Business continues quiet and prices are unchanged; 97c. per barrel for state common, 200 lb. net; $1.37 for 300 lb. barrel; $1.55 for 300 lb. finishing; $1.10 for 200 lb. finishing; and $1.72 for 350 lb.

Brick—Prices are lower and Hudson River common brick can be had at $5 New York.

IRON AND STEEL

Pig Iron—Better business was the rule during December. Some fair buying occurred, especially in the West. The Buffalo furnaces were fairly well cleaned up, as far as the low-priced iron went. A feature of the month's business was the inability of Birmingham producers to maintain a $10 quotation for No. 2 Southern Foundry. In Cincinnati prices went off slightly, but in New York there was an advance. In Chicago likewise prices are slightly higher than they were Dec. 1. It is evident that several additional furnaces will go in blast this month, but the net gain in production is problematical. The pig-iron output is about 50% of normal, and for December will not be far from 1,500,000 tons. The buying movement, which was fair, was not of the broad character which so often marks the depth of depression.

Quotations for pig-iron in lots of 100 tons or over at the points named are as follows: Cincinnati: Southern Foundry No. 2, $12.50 to $13; Northern Foundry No. 2, $14 to $14.50; Northern Foundry No. 3, $13.75 to $14.

In New York, iron is quoted as follows: No. 2-X Northern Foundry, $14.25 to $14.50; No. 2 plain Northern Foundry, $14 to $14.25; No. 2 Southern Foundry, delivered tidewater, N. Y., $14 to $14.25.

In Birmingham, Southern Foundry No. 2 is $9.50 to $9.75. Several sales have been made at the latter figure. In Chicago, Northern Foundry No. 2 is $12.75 to $13.25. In Pittsburgh, bessemer iron is $14.70 and basic $13.45. This includes the 95-cent freight rate from the Valley to the Pittsburgh District.

Steel Rails—The buying of rails was more active in December than in any month of the last half of the year, but even this was nothing to boast about. The New York Central placed a contract for a fair lot, and it is evident that the other trunk lines will buy about 50% of their normal requirement. American mills had very little hope of getting the 30,000 tons of rails wanted in Norway, and consequently were not disappointed when the order was placed with German mills. In the South American trade and Asiatic business, however, there is quite a little likelihood of a change, and considerable steel will be shipped to Siberia by way of the Panama Canal in the spring. It is believed that the Pennsylvania will buy 200,000 tons this year, and the Baltimore & Ohio is reported to be negotiating for 40,000 tons. A feature of the present market is the demand for light rails which has come from rerolling mills, and are selling for about a dollar per ton less. Other quotations are as follows: Standard quotations for lots of 500 tons or over are unchanged. Standard sections of bessemer are $28, and basis $30. These quotations are per net ton f.o.b. Pittsburgh. Girder rails in 30-ft. lengths are $36.40 per gross ton, and in 60-ft. lengths $38.40, both f.o.b. New York. Other prices f.o.b. Pittsburgh for large lots are as follows: Standard sections, $1.25; 25- to 45-lb. sections, $1.15; 16- to 20-lb., $1.20; 12- to 14-lb., $1.25; 8- to 12-lb., $1.30. All of these quotations are per 100 lb. Relaying rails in New York are cheaper at $19 to $19.50 per ton.

Structural Shapes—Reports of the Bridge Builders' Society show that business has not improved to any extent. Fabricating shops are still running about 30% of maximum capacity. Most of the work is small lots. The most interesting piece of news is the advance of a dollar per ton in structural shapes and the announcement that the subway work in New York will go forward without any further hindrance due to the recent decision that the Alien Labor Law was unconstitutional. Prices are stated a dollar per ton higher than last month, and for large lots from mills Pittsburgh are as follows: I-beams, 3 to 15-in.; channels, 3 to 15-in.; angles, 3 to 6-in.; and T's, 3 in. and over, 1.10c. Other quotations are: I-beams over 18-in.; H-beams over 18-in.; channels over 15-in.; angles over 6-in., 1.25c.; T's, 1.20c. Deck beams and bulb angles, 1.45c; handrail T's, 1.90c. Cutting to specified lengths is charged at the following rates: Under 3 ft. to 2 ft. inclusive, 25c. per 100 lb.; 2 ft. to 1 ft. inclusive, 50c.; less than 1 ft., $1.55. No charge is made for cutting into specified lengths over 3 ft. In Chicago the base price is 1.25 to 1.30c. for mill shipment, and for shapes out of warehouse 1.80c. is demanded. In New York the base price is 1.29c.

Cast Iron Pipe—It is generally recognized that prices of cast-iron pipe are unusually low. Business shows more activity, due, doubtless, to the attractive quotations. Most of the buying comes from private water companies, gas companies, and other consumers who are quick to recognize bargains, but there has been a notable increase in buying by municipalities. Boston is again in the market for 4000 tons, having bought a similar lot in November. It is believed that some foreign business will shortly be developed. Operations in the foundries in the Birmingham district have been increased within the last week. The following quotations are per net ton at the points named:

Birmingham, Ala., 4 in., $20; 6-in. and upward, $19.
New York, N. Y., 6 in. and larger, $20 to $20.50.
Chicago, 4-in., $25.50; 6- to 12-in., $23.50; over 12-in., $22.
Gas pipe is $1 per ton higher in all markets.

Plates—The advance from the low quotation of 1.05c. Pittsburgh made on Dec. 30 did not stimulate any trade, but it improved the situation. Inquiries have come up for several boats, mostly tankers, and there is a fair inquiry for plate for water pipe on the Pacific Coast. Railroad business is exceedingly quiet. It is rumored that the Pennsylvania will build several thousand steel gondolas, but most of the railways are content to wait, as they have plenty of rolling stock for the traffic now offering, and can get new stock made up in a very short time. The base price is 1.10c. Pittsburgh, and includes all sizes above ¼ in. For sizes under ¼ in., to and including 2 1/16 in., 1.20c., is paid. In Chicago mill shipments are 1.25c., and for plates from stock 1.75c. to 1.80c. In New York, mill shipments are 1.31c.

Pipe—Business shows more activity. There are several inquiries for line pipe, and while no one expects the trade of last year, it is evident that there will be a fair run of business. Discounts continue without change the following discounts and net prices being repeated from last month:

	Black	Galvanized
¾- to 2-in. steel, butt welded	81%	72½%
2½- to 6-in. steel, lap welded	80%	72½%
7- to 12-in. steel, lap welded	77%	66½%

At these discounts, the net prices of pipe per foot, in large lots, at Pittsburgh are as follows:

Diameter	Cents Black	Cents Galvanized	Diameter	Cents Black	Cents Galvanized
¾-in.	2.20	3.15	5-in.	29.60	42.20
1-in	3.24	4.67	6-in.	38.40	54.60
1¼-in	4.38	6.30	7-in.	55.00	80.00
1½-in	5.25	7.55	8-in.	57.50	84.00
2-in.	7.05	10.15	9-in.	79.50	$1.16
2½-in.	11.70	16.70	10-in.	95.00	$1.38
3-in.	15.25	21.80	11-in.	$1.06	$1.55
4-in.	21.80	31.00	12-in.	$1.17	$1.70

Sheets—While it is not generally recognized as a sign of improved conditions, it is almost always the case that larger buying of steel products in general is foreshadowed by more activity in the sheet trade. The news that the mills of the corporations are operating at 60% of capacity, and some of the independent mills as high as 75%, will be welcome to those who are looking for an improvement in the trade. Business is fairly active, and there is a disposition to let conditions take their course, and not force a market, as it is recognized that prevailing prices are unusually low.

The following quotations are for large lots of sheets in Pittsburgh and small lots from store, New York.

	Cents per Pound—Large lots Pittsburgh Black	Large lots Pittsburgh Galv.	Ware house delivery New York Black	Ware house delivery New York Galv
No. 10	1.55	1.90	....	....
No. 12	1.55	2.00	....	....
No. 14	1.60	2.00	....	....
No. 16	1.65	2.15	2.35	2.75
Nos. 18 and 20	1.70	2.30	2.40	2.90
Nos. 22 and 24	1.75	2.45	2.45	3.05
No. 26	1.80	2.60	2.50	3.20
No. 27	1.85	2.75	2.55	3.35
No. 28	1.90	2.90	2.60	3.50

Steel Sheet Piling—Very little business is offering and the base price in Pittsburgh is unchanged, at $1.55 to $1.60.

Steel Shapes—For small lots of iron and steel from jobbers' warehouse in New York. Quotations are $1 per ton higher than last month. The revised prices are given below:

	Cents Per Lb.
Refined iron:	
1 to 1⅞ in., round and square	1.85
1½ to 4 in. x ⅜ to 1 in.	1.85
1½ to 4 in. x ¼ to 1/16 in.	2.05
Norway bars	3.20
Burdens bar iron	3.15
Soft steel:	
¾ to 3 in., round and square	1.85
1 to 6 in. x ⅜ to 1 in.	1.85
1 to 6 in. x ¼ and 5/16	2.00
Rods—⅝ and ½ in.	1.95
Bands—1½ to 6x 5/16 in. to No. 8	2.15
Beams and channels—3 to 15 in.	1.90
Angles:	
3 in. x ¼ in. and larger	1.90
3 in. x 1/16 in. and ⅛ in.	2.35
1½ to 2¾ in. x 1/16 in. and thicker	2.00
1½ to 2½ in. x ⅛ in.	2.10
1 to 1¼ in. x 1/16 in.	2.10
1 to 1¼ in. x ⅛ in.	2.15
Tees:	
1½ to 2½x¼ in.	2.05
1½ to 2½x 1/16 in.	2.15
3 in. and larger	1.95

Freight Rates via Panama—The ocean freight market is very uncertain. It is difficult to secure enough vessels to carry the cargoes offered. An advance of 5c. per 100 lb. is now demanded for shipments from New York and Philadelphia bringing the quotation to 30c. For large lots of steel such as shapes, reinforcing bars, plates wire and similar products the rates to Pacific Coast points are as follows: From Bethlehem, 37.5c.; Chicago, 55c.; Cleveland, 44c.; Coatesville, 40c.; Johnstown, 39.5c.; New York, 30c.; Niles, 43c.; Philadelphia, 30c.; Pittsburgh, 46c.; Steubenville, 41c.; Wheeling, 41c.; Youngstown, 43c.

Wire—Foreign business is the life of the market; it is estimated that 80,000 tons are wanted for export. Most of this is barbed wire. Plain wire, is $1.40 to $1.45; galvanized wire, $1.80 to $1.85; painted barbed wire, $1.60 to $1.65; galvanized barbed wire, $2 to $2.05; galvanized staples, $2, and polished staples, $1.60. All these prices are per hundred pounds for large lots in the Pittsburgh market.

Old Material—Business shows little improvement but prices are better. These have not been established so much by actual transaction as by quotations named on hoped for business. It is recognized that those having scrap for sale at first hand are unwilling to dispose of their supplies at the old low quotations, and somewhat higher figures have been made, without inducing any business. In New York the demand shows an improvement and quotations per net ton are as follows:

	Per Net Ton
Heavy-melting steel scrap	$7.25 to $7.50
Pipes and flues	7.00 to 7.25
No. 1 railroad wrought	8.75 to 9.25
Stove plate	7.50 to 8.00
Malleable cast	7.00 to 7.50
No. 1 machinery cast	9.75 to 10.25
No. 1 yard wrought, long	8.25 to 8.75
Wrought turnings	5.50 to 6.00

The Chicago market reports little or no demand but there is some hope for an improvement. Quotations are from 25 to 50c. per ton higher than a month ago.

	Per Gross Ton
Heavy-melting steel scrap	$8.75 to $9.00
	Per Net Ton
No. 1 railroad wrought	$8.25 to $8.75
No. 2 railroad wrought	7.50 to 8.00
No. 1 cast scrap	9.25 to 9.50
Pipes and flues	6.25 to 6.75
Agricultural malleable	7.25 to 7.50
Railroad malleable	8.00 to 8.25

In Pittsburgh the demand shows an improvement and there is hope for much better business after the first of the year. Heavy melting scrap has advanced rapidly, and some business has been transacted. Practically all of the quotations given below, which are per gross ton, show an advance compared with last month.

	Per Gross Ton
Heavy-melting steel scrap	$11.25 to $11.50
Re-rolling rails	11.75 to 12.00
No. 1 foundry cast	11.25 to 11.50
Old car wheels	10.75 to 11.00
Machine shop turnings	7.75 to 8.00
Railroad malleable	10.00 to 10.25

Wire Rope—Prices are lower and the new discounts are 47 and 5% from list for galvanized and 55 and 5% for bright. At these discounts the net price of wire rope at the mill is as follows:

Diameter in Inches	Price per Foot—Cast Steel	Crucible Steel	Plow Steel
2½	$0.75	$0.90	$1.07
2¼	0.61	0.73	0.86
2	0.47	0.57	0.67
1¾	0.39	0.49	0.58
1½	0.28	0.34	0.40
1¼	0.20	0.24	0.27
1	0.13	0.15	0.18
⅞	0.08	0.09	0.11
⅝	0.06	0.07	0.08

Chain—Prices are steady and without change, as follows: These prices are per 100 lb., f.o.b., Pittsburgh:

5/16 in.	$7.50	½ and 9/16 in.	$3.00
7/16 in.	4.95	⅝ and 11/16 in.	2.90
¼ in.	3.95	¾ and 13/16 in.	2.80
9/16 in.	3.40	⅞ and 15/16 in.	2.70
3/8 in.	3.20	1 to 1¼ in.	2.60

EXTRAS TO ABOVE LIST PER 100 POUNDS

	For BB	For BBB
5/16-in. and ¼-in.	$1.50	$2.00
5/16-in. and larger	1.25	1.75

Freight Rates—The freight rates on finished steel products from the Pittsburgh district, including plates, structural shapes, merchant steel and iron bar, pipe fittings, plain and galvanized wire, nails, rivets spikes, and bolts, black sheets (except planished) chains, etc., are as follows in cents per hundred pounds: Albany, 16; Buffalo, 11; Boston, 18; Baltimore, 14½; Canandaigua, 13½; Cleveland, 10; Columbus, 12; Cincinnati, 15; Chicago, 18; Denver, Colo., 85½; Harrisburg, 14½; Louisville, 18; New York, 16; Norfolk, 20; Philadelphia, 15; Rochester, 11½; Richmond, 20; Scranton, 15; St. Louis, 23; Washington, 14½.

Coke—The output shows a decided improvement compared with last month. For the week ending December 26 the output in the Upper and Lower Connellsville regions was 217,000 tons. Prices show practically no change. Blast furnace coke sells at $1.50 to $1.60 per net ton at oven for prompt shipment, and contracts for the first half, and in some cases throughout the year at $1.75 per net ton. For foundry coke prices are better, prompt shipments being held at $2 while $2.15 to $2.25 per net ton is demanded for contracts.

OILS AND PAINTS

Linseed Oil—Prices are lower. For city raw 50 to 51c. is asked in New York. The usual advance of 1c. per gal. is charged for boiled oil.

Petroleum Products—The year 1915 opened very differently from the previous one; this year there is a surplus of crude product, while last year the situation was entirely changed. For crude petroleum at the wells the following prices are charged: Pennsylvania, Second Sand and Tiona, 1.50; Mercer black and New Castle, $1.07; Kansas and Oklahoma, 55c. California oils, 40c. for 21 to 23.9 gravity; 42½c. for 24 to 26.9

gravity; 45c. for 27 to 28.9 gravity; 55c. for 29 to 30.9 gravity and 60c. for 31 to 32.9 gravity.

Spirits Turpentine—Prices are easier and spot turpentine can be had at 45½c. New York, and at 42¾c. Savannah.

REINFORCING MATERIALS

Bars, Concrete Reinforcing—Prices were advanced $1 per ton in the Pittsburgh market Dec. 29. The new quotation of 1.10c. Pittsburgh applies only to deliveries made during the first quarter. For later deliveries, 1.15c. Pittsburgh is asked. These quotations are the minimum. Prices are as follows:

	Cents per Pound		
Size	Mill Shipments Pittsburgh	*Warehouse Pittsburgh	Delivered from *Warehouse New York
¾-in. and larger...	1.10	1.50	1.95 to 2.00
⅝-in.	1.15	1.65	2.00 to 2.05
½-in.	1.30	1.80	2.15 to 2.20
⅜-in.	1.40	1.90	2.25 to 2.30
¼-in.	1.70	2.20	2.60 to 2.65

*Bars from warehouse are cut to desired length without extra charge.

Triangle Mesh—Prices continue without change as follows:

PRICE PER 100 SQ.FT.

		Plain Material		Galvanized	
Style No.	Cross Sec. Area per Ft. Width	Carload Lots	Less Than Car Lots and Over 10,000 Sq.Ft.	Carload Lots	Less Than Car Lots and Over 10,000 Sq.Ft.
*4	$0.102	$1.00	$1.23	$1.12	$1.34
5	0.077	0.80	0.97	0.89	1.00
6	0.058	0.63	0.77	0.71	0.84
*7	0.041	0.49	0.60	0.55	0.66
*23	0.170	1.69	2.05	1.88	2.24
24	0.142	1.46	1.77	1.62	1.93
25	0.124	1.29	1.57	1.43	1.71
*26	0.110	1.17	1.42	1.30	1.55
*27	0.085	0.96	1.17	1.07	1.28
28	0.066	0.80	0.97	0.89	1.06
29	0.049	0.66	0.80	0.73	0.87
31	0.261	2.49	3.02	2.76	3.29
32	0.225	2.16	2.62	2.40	2.86
33	0.196	1.93	2.34	2.14	2.55
34	0.146	1.48	1.80	1.64	1.96
35	0.109	1.117	1.42	1.30	1.55
36	0.075	0.87	1.05	0.97	1.15
38	0.380	3.55	4.30	3.93	4.68
*39	0.325	3.05	3.70	3.38	4.03
40	0.283	2.68	3.25	2.97	3.54
41	0.208	2.05	2.48	2.27	2.70
42	0.151	1.55	1.88	1.72	2.05
*43	0.101	1.10	1.34	1.23	1.46

*This material is made in regular widths of 18, 22, 26, 30, 34, 42, 46, 50, 54 and 58 in. Standard lengths in rolls are 150, 250, 300 and 600 ft.

METALS

Copper—The buying movement during December was large. Despite the fact that foreigners bought very little, exports for those two months were about half of normal, and the statistics show an unusual amount of metal going into Italy and Norway, which, on the face, looks suspicious, but may be accounted for by the fact that these countries have bought their electrical supplies and most of their copper wire from Germany, and will now have to make it themselves. This may account for part of the increase. The highest price was reached before Christmas, when 13.50c. was paid in New York. Since that time there has been very little business, not enough to establish quotations, but there is no doubt that a round tonnage could be placed at considerably less, whether as low as 13c. or not, is another question. There is still considerable business to go forward for Russia, and the buying is by no means over. Buying from Great Britain should commence again in a few months, and those in close touch with the copper trade believe the next few months will see much higher prices for the metal. Very little new domestic consumption has been developed in the last month.

Tin—The market has been almost lifeless. Domestic consumers bought sparingly, the tin plate business being small, but there is a prospect that there will be a much better demand for tin plate should the war continue. Prices have been near the 33.50c. level for the entire month. It is unusual for the tin market to fluctuate within such narrow limits. For the present there is sufficient supply on hand to meet any demands likely to occur.

Lead—The market has not maintained its full strength, and a decline of $2 per ton was announced. The price is now 3.80c. in New York, 3.67½c. St. Louis. The supply is more than ample for present demands.

Spelter—A marked improvement has been made both in the price and the demand. In New York spelter is quoted at 5.55 to 5.65c., and in St. Louis at 5.45c.

Miscellaneous Metals—Prices are higher due to the advance in the price of copper. The demand is small. Quotations are as follows for small lots in New York:

Bismuth	$3.75 to $4.00
Brass tubes, iron-pipe sizes:	
½-in.	.17
¾- to 3-in.	.16
3½-in.	.16
4-in.	.17
Brass rods	.14¾
Brass sheets	.15
Solder, half and half guaranteed	.22
Zinc sheets	9 to 9½
Copper sheets, base	.17½
Pig tin (five-ton lots, cash)	.34

Old Metals—While the demand shows no improvement, prices are higher. It is significant that the quotations for old metal have by no means fully shared in the advance of ingot copper. Dealers' buying quotations are as follows:

	Cents
Copper, heavy and crucible	11.00
Copper, heavy and wire	10.75
Copper, light and bottoms	9.75
Brass, heavy	8.00
Brass, light	6.25
Heavy machine composition	9.75
Composition turnings	8.50
Lead, heavy	3.30
Zinc scrap	3.90

Antimony—Prices of antimony are most irregular. There was a decline early in December, and later an advance, due to the report that Japanese interests had bought back the contract sold earlier. While the domestic demand is light, there is some buying from makers of munitions of war. For Cookson's, 15 cents is asked. For Hallett's, 14 cents, and for outside brands, 13 cents.

Aluminum—The market is steady. No. 1 ingots are quoted at 19 to 19.50c., New York. Sheet aluminum is quoted at 28c.

CLAY PRODUCTS

Quotations have been withdrawn and no new discounts issued.

MISCELLANEOUS

Rubber—It is evident that the British Government is endeavoring to pile up about 20,000 tons of high-grade rubber, before it will allow American manufacturers to accumulate stock. The market is in fairly good shape. Prices are firm but not high, and at the present quotation of 76c. for Up River Para Fine, there is plenty of margin left for manufacture. For Up River Para Coarse, 58c. is demanded. Ceylon rubber sells at 88c. for sheet and 90 cents for crepe.

Railroad Ties—Business is at a standstill. Prices are exceedingly low, 76c. being quoted for yellow pine ties, 7x9-in. by 8 ft. 6 in., and 64c., 6x8-in. by 8 ft. There is no doubt that a large order from one of the leading trunk lines would bring a certain advance, especially as present prices are 20c. below those current last year, and the ocean freight rates present a considerable problem.

Lighterage Limits—The free delivery or "Lighterage Limits" in New York City are as follows: In Manhattan, from a point opposite the Fort Lee ferry, south along the Hudson River around the Battery and north along the East and Harlem Rivers to the Jerome Ave. Bridge at 155th St. In New Jersey, south from Fort Lee ferry to Bayonne City, points on the north and east shores at Staten Island, between Bridge Creek (Arlington) and Clifton, both inclusive, and including Elm Park, Erastina and Shooters Island. In Brooklyn, from 69th St., Bay Ridge, north to Pot Cove, Astoria, Long Island City.

Explosives—Dynamite of the kind generally used by contractors is approximately 11@13c. per lb., f.o.b. factory, in ton lots. Blasting powder, classified as "soda" grade, is sold at $1.20@1.40 per keg of 25 lb. in lots of 10,000 lb.

Exploders, per hundred, are sold at the following prices: 4 ft., $3.60; 6 ft., $4.10; 8 ft., $4.60; 10 ft., $5.10; 12 ft., $5.60; 16 ft., $6.60; 20 ft., $7.50; 25 ft., $9.40; 30 ft., $12; 36 ft., $14.60.

Caps in lots of 10,000 are $7@8 per thousand.

Blasting machines for 10 holes are $12; 25 holes, $20; 50 holes, $40; 100 holes, $60.

A New High Record in Municipal Expenditure

Statistics compiled by the "Financial Chronicle" show that the sales of municipal bonds in 1914 aggregated $453,000,000. This establishes a new high record, being about 13 per cent. larger than the bond sales in 1913, which was practically a new record. The funds realized from the sales of these bonds were practically all expended in engineering construction and for municipal improvements. The following table shows the sales of bonds during the month of December and for 12 months of a number of recent years.

	Month of December	For the 12 Months
1914	$25,453,650	$453,256,950
1913	43,307,917	396,367,756
1912	27,657,909	386,551,828
1911	36,028,842	396,859,646
1910	36,621,581	320,036,181
1909	31,750,718	339,424,560
1908	28,050,299	313,797,549
1907	13,718,505	227,643,208
1906	21,260,174	201,743,346
1905	8,254,593	183,080,023
1904	9,935,785	250,754,946
1903	13,491,797	152,281,050
1902	11,567,812	152,846,335
1901	15,456,958	149,498,589
1900	22,160,751	145,733,062
1899	4,081,225	118,113,005
1898	7,306,343	103,084,793
1897	17,855,473	137,984,004
1896	10,664,287	106,496,060
1895	8,545,804	114,021,633
1894	13,486,374	117,176,225
1893	17,306,564	77,421,273
1892	3,297,249	83,823,510

The Erie Pump & Equipment Co., Erie, Penn., has recently been organized. This is a consolidation of the Erie Pump & Engine Works, Erie, and the Northern Equipment Co. John A. Dougherty, who for a number of years has been recognized as an unusual designer of centrifugal pumps, is to take charge of the designing. The officers of the company include E. W. Nick, Pres., D. H. Dumond, Vice-Pres., and G. B. Deenschoten, Secy.

RAILWAYS

Maine—Eastern Maine R.R.—This company has filed a petition with the Public Utilities Commission for the approval of the location of the route of its proposed railway from Houlton to Bangor, Maine, about 103 miles.

✚**West Virginia**—Horse Creek Land & Mining Co.—This company, it is reported, has awarded a contract to BOARD & DUFFIELD, Charleston, W. Va., to construct the first three miles of its railway on Peter Cave Fork, Lincoln County, W. Va. L. E. Poteet, Quarrier St. Bldg., Charleston, is Gen. Mgr. Noted Dec. 17.

Florida—See item under Miscellaneous—Harbor Improvements, Jacksonville, Fla.

✚**Minnesota**—Minnesota, Dakota & Western Ry.—The MINNESOTA & ONTARIO POWER CO., Minneapolis, Minn., has been awarded a contract by this company for constructing an extension from Littlefork to Craig, about 45 miles.

Kansas—Salina Northern R.R.—This company has been incorporated to construct and operate a railway from Salina to Osborne, Kan., about 80 miles. The incorporators include F. C. York, Saline, F. L. Brown, Sylvan Grove and Thomas F. Brann, Lincoln Center.

Arizona—Mascot & Western Ry.—This company is preparing to start work soon on the construction of its proposed railway from the mines of the Mascot Copper Co., in the Dos Cabesas district to a point near Kelton, Ariz., about 35 miles. John A. Street, 1611 Harris Trust Bldg., Chicago, Ill., is interested. Noted July 23 and Nov. 26.

California—California Southern Ry.—This company has been incorporated to construct a railway from Blythe Junction through the Palo Verde Valley to Blythe, Calif., about 40 miles. J. M. Neeland, 1003 Los Angeles Investment Bldg., Los Angeles, Calif., is interested.

Quebec—Canadian Northern Quebec Ry.—Surveys are being made by this company for the extension of its railway from Huberdeau to St. Remi, Que., about eight miles. H. K. Wicksteed, Toronto, Ont., in Ch. Engr.

ELECTRIC RAILWAYS

Hartford, Conn.—The Hartford, New Britain & Meriden Ry. Co. has been incorporated to construct an electric railway from a connection with the Connecticut Co. in Hartford to Meriden, Berlin, Newington and Wethersfield. John C. Warnock, Meriden, is interested. Noted Apr. 10, 1913.

Norwich, Conn.—The Connecticut Co. is considering plans for the extension of five of its lines in Norwich. Samuel Anderson, Norwich, is Gen. Mgr.

Torrington, Conn.—The Torrington Traction Co. has been incorporated to construct and operate an electric railway from Torrington to Thomaston, about ten miles. The incorporators include Hosea Mann and George B. Goodwin, Torrington, and Howard Guernsey, Thomaston. Noted Dec. 24.

Haddonfield, N. J.—Plans are being prepared for the construction of an electric traction line from Haddonfield to Berlin, by Frank O. Stein, Berlin, N. J., and associates. A preliminary application for right of way has been made to the Haddonfield Commissioners.

Newark, N. J.—The Board of Works has granted a franchise to the Public Service Ry. Co. for the construction of a line on Roseville Ave., from Orange St. to Bloomfield Ave. R. E. Danforth, Newark, is Gen. Mgr.

Charleston, W. Va.—The Charleston-Dunbar Traction Co. plans to construct about 18 miles of new track this spring. E. W. Alexander, Charleston, is Gen. Mgr. and Pur. Agt.

Columbus, Ga.—The Columbus R.R. Co. has been petitioned to prepare plans for the extension of its lines to Riverdale. John S. Bleeker, Columbus, is Mgr.

New Orleans, La.—Plans are being prepared by the New Orleans Ry. & Light Co. for constructing about 11 miles of new track in New Orleans. M. S. Sloan, New Orleans, is Gen. Mgr.

Paxton, Ill.—Preliminary arrangements are being made by the Kankakee & Urbana Traction Co. for the extension of its line to Paxton. William I. Laffell, Urbana, is Vice-Pres., Gen. Mgr. and Pur. Agt.

Newport, Tenn.—According to press reports a company is being organized to construct an electric railway from Kingsport through Sullivan, Washington, Greene and Cook Counties, to Newport.

✚**Almont, Mich.**—The Detroit, Almont & Northern Ry. Co. has awarded a contract to FRANK BISHOP, Almont, for the extension to its line from Almont to Imlay City, about nine miles.

Mount Vernon, Ill.—The City Ry. Co. contemplates the construction of a two-mile extension to its line in Mount Vernon. Louis G. Pavey, Home National Bank Bldg., Mount Vernon, is Pres. and Gen. Mgr.

Peoria, Ill.—The Peoria Ry. Co. is preparing plans for double-tracking its line on Jackson St. to the city limits of Peoria. R. W. Bailey, Peoria, is Gen. Supt.

Rockford, Ill.—The Rockford City Traction Co. plans to construct about 50 miles of new track this spring. W. C. Sparks, Rockford, is Gen. Mgr. and Pur. Agt.

St. Louis, Mo.—John A. Robitch, F. Arnold and C. Brenner have applied to the City Council for a franchise to extend the electric railway on Bellfontaine St. from its present loop to the city limits.

Houston, Tex.—The Houston Electric Ry. Co. has applied to the City Council for a franchise to extend its line on San Felipe St. to the city limits. David Daly, Houston, is Local Mgr.

Boise, Idaho—The construction of an electric railway over Blue Mountain from Boise, Idaho, to La Grande, Ore., is contemplated by C. J. Franklin, Boise, E. A. Pack, Weiser, Idaho and J. G. Brown, Galion, Ohio.

Ogden, Utah—Plans are being prepared by the Ogden Rapid Transit Co. for the extension of its line to connect Wellsville, Mendon, Collinston, Deweyville, Honeyville, Garland, Tremonton and Brigham City. P. D. Kline, Ogden, is Gen. Mgr. and Pur. Agt.

Sausalito, Calif.—A. E. Roberts is preparing plans for the construction of the proposed incline railway from Sausalito to the summit of the heights, 1000 ft. above the city. Noted Oct. 22.

London, Ont.—The Hydro-Electric Power Commission has prepared estimates for constructing a hydro-electric railway from London to Tillsonburg. Estimated cost, $892,000. W. A. Pope, Continental Life Bldg., Toronto, is Secy. of Comn.

Toronto, Ont.—The Toronto Suburban St. Ry. Co. plans to construct about 40 miles of new track between Toronto and Guelph. George C. Royce, Toronto, is Secy. and Gen. Mgr.

LIGHT, HEAT AND POWER

✚**Boston, Mass.**—The Infirmary Trustees of the Public Works Department have awarded the contract for wiring the Long Island nurses' home and two ward buildings to CARLISLE & CONNER, 258 Washington St., Boston, at $10,900. Other bidders were: Edwin C. Lewis, Inc., $13,591; Lord Electric Co., $13,800, and the Clark & Mills Electric Co., $14,166. Thomas A. McQuade is Chn., Infirmary Trustees.

Hartford, Conn.—It is reported that the Billings & Spencer Co., manufacturer of drop forgings and tools, will equip a boiler plant at the factory on Laurel St., recently purchased from the Columbia Motor Vehicle Co.

New London, Conn.—The Trustees of the Connecticut College for Women have had plans prepared for the installation of a heating plant at the college, to cost about $20,000. It is expected that the contract will be awarded at the January meeting of the Board of Trustees. Ewing & Chappell, 101 Park Ave., New York, N. Y., prepared the plans.

Waterbury, Conn.—Bids will be received until Jan. 16, for a boiler house and steam heating plant, to be built on School St., in connection with the new Clark School. Robert C. Kimball, Boston, Mass., is the Engr. Louis A. Walsh, 51 Leavenworth St., Waterbury, is the Arch.

★**Binghamton, N. Y.**—(Official)—Bids will be received until 2:30 p.m., Jan. 21, by the State Hospital Commission, Capitol, Albany, for heating, plumbing and electric work, and new boiler and stack, for the new building for Chronic Patients at the Binghamton State Hospital. See advertisement under "Contracts To Be Let" in issue of Dec. 31.

★**Collins, N. Y.**—(Official)—Bids will be received until 2:30 p.m., Jan. 21, by the State Hospital Commission, Capitol, Albany, N. Y., for underground steam connections, etc., for the existing buildings of the Gowanda State Homeopathic Hospital, Collins. See advertisement under "Contracts To Be Let."

New York, N. Y.—(Borough of Manhattan)—(Official)—Bids will be received until 3 p.m., Jan. 13, by the Board of Trustees of Bellevue and Allied Hospitals, 415 East 26th St., Borough of Manhattan, for additions and alterations to plumbing and gas fitting in the present main building of the Harlem Hospital, 136th and 137th St. and Lenox Ave. Bids will be received at the same time for plumbing, heating and ventilating work for the alterations in the power house and ambulance station of the Harlem Hospital. John W. Brannan, M. D., is Pres., Bd. of Trustees.

New York, N. Y.—(Borough of Manhattan)—The United Electric Light & Power Co., 130 East 15th St., New York, has taken out a permit for the construction of a three-story, 25x100-ft. substation, at 354 West 45th St. It will cost $65,000. W. E. McCoy, 130 East 15th St., is Arch.

★**Poughkeepsie, N. Y.**—(Official)—Bids will be received until 2:30 p.m., Jan. 21, by the State Hospital Commission, Capitol, Albany, for a motor for laundry at the Hudson River State Hospital, Poughkeepsie. Lewis M. Farrington is Asst. Secy. of the Comn. See advertisement under "Contracts To Be Let."

★**Yorktown Heights, N. Y.**—(Official)—Bids will be received until noon, Jan. 12, by William B. Osgood Field, Pres., Bd. of Mgrs., New York State Training School for Boys, 2 West 45th St., New York, N. Y., for the heating, plumbing and electric work for seven cottages, and for the construction of a power house and coal pocket for the training school. See advertisement under "Contracts To Be Let" in issue of Dec. 31.

Camden, N. J.—The Victor Talking Machine Co. is receiving bids for the construction of a power plant, estimated to cost $150,000, as a unit of the group of new buildings costing about $1,000,000. The proposed power house will be located at Cooper and Front St.; it will be 100x220 ft., two stories, with a foundation of monolithic concrete. Ballinger & Perrot, Philadelphia, is Engr. in Charge.

Holmesburg, Penn.—Bids will be received until noon, Jan. 12, by R. H. Harte, M. D., Dir., Dept. Public Health and Charities, 584 City Hall, Philadelphia, for the construction of a power plant for the Home for the Indigent, Holmesburg. Philip H. Johnson, 1824 Land Title Bldg., Philadelphia, is Arch. Noted Dec. 3.

✚**Lansford, Penn.**—The Panther Valley Electric Light, Heat & Power Co., Lansford, has awarded the contract for the construction of a substation to cost about $10,000 to ANDREW BRESLIN, Summithill, Penn. Noted Oct. 29.

Rochester, Penn.—(Official)—Bids will be received until 8 p.m., Jan. 12, by the Board of Directors of the School District of Rochester, for steam heating and mechanical ventilating systems in the new High School building at Rochester. George F. Bauer is Pres. and George H. Karcher is Secy. of the Bd. of Dir.

✚**Rockmart, Ga.**—The City Council has awarded contracts for new boilers and generators for the municipal electric-light plant to the AMES IRON WORKS, Oswego, N. Y., and the ALLIS-CHALMERS CO., Milwaukee, Wis., respectively. Noted July 30 and Aug. 27.

Louisville, Ky.—Bids will be received until Jan. 14 by the Board of Education for the installation of heating and ventilating equipment in a school building at Sixth and Walnut St. J. Earl Henry is Arch. and Engr.

Louisville, Ky.—It is reported that the Louisville Bridge & Iron Co. has decided to change all of its motors from direct to alternating current, and will soon purchase new motors aggregating several hundred horsepower.

Salem, Ohio—It is reported that the City Council is considering the installation of a municipal electric-light plant to cost about $20,000.

Toledo, Ohio—(Official)—Bids will be received until 10 a.m., Jan. 29, by the Board of Commissioners of Lucas County, for the construction and equipment of a new lighting, heating and power plant for the Lucas County Childrens' Home. E. Bayer, 1530 Nicholas Bldg., Toledo, is Engr. Charles J. Sanzenbacher is Audr. of Lucas County. Noted Oct. 15, 1914.

Saginaw, Mich.—An election will be held, Jan. 11, at which the citizens will vote on the question of issuing $750,000 in bonds, to be used for the construction of a municipal light and power plant. Herman H. Eymer is City Engr. Noted Aug. 13 and Oct. 15, 1914.

Elgin, Ill.—It is reported that a special election will soon be held at which the citizens will vote on the question of issuing $25,000 in bonds to be used for the installation of a municipal electric-light plant. William F. Sylla is City Clk.

Ashland, Wis.—The Ashland Lighting Co. plans to construct an auxiliary steam plant in the west end of the city, and later to build a new gas plant and holder. It is reported that all of this work will be done within the next six months.

Lancaster, Wis.—The Wisconsin Railway Commission has authorized the Lancaster Electric Light & Power Co. to issue $34,700 in stock for the purchase of power and transmission lines between Platteville and Lancaster.

Lamberton, Minn.—The local electric-light plant has been purchased by R. F. Wherland, Redwood Falls, and H. L. Wherland, Faribault. It is reported that the new owners will extend and improve the plant.

Winfield, Kan.—The Electric Light and Water Commission has been authorized by the City Council to install an additional 500-kw. generating unit in the municipal electric-light plant. It is understood that bids will be asked within the next 30 days. W. J. Welfelt is Supt.

Madison, S. D.—The City Council will improve the municipal electric-light plant at a cost of about $20,000. A new engine and generator will be purchased. Edward Rafferty is Supt. of the plant.

Worland, Wyo.—It is reported that plans are being made to rebuild the plant of the Worland Electric Light Improvement Co., which was recently burned. E. G. Ditto, Worland, is Mgr. of the company.

Prairie Home, Mo.—The Town Board has granted a 20-year franchise to Kelly Simmons for the construction and operation of an electric light plant in Prairie Home. The building will be 30x40 ft., and the plant will be of the alternating current type, Fairbanks-Morse, 25-kv.-a., driven by a 25-hp. engine.

Fort Bidwell, Calif.—It is reported that R. R. Rice, H. Dunbar and J. McCosh Smith contemplate the installation of gas plants at Fort Bidwell and Eagleville, Modoc County, Calif.

Brockville, Ont.—The Provincial Hydro-Electric Commission contemplates the construction of an auxiliary power house at Brockville to cost about $4000. W. W. Pope, Continental Life Bldg., Toronto, is Secy. of the Comn.

Kamloops, B. C.—It is reported the city contemplates extensions and improvements to the municipal electric light plant at an estimated cost of $40,000. J. J. Carment is Secy. and Treas.

BRIDGES

✚Concord, N. H.—The City Council has awarded the contract for the construction of the Pembroke Bridge over the Merrimack River, to the BERLIN CONSTRUCTION CO., Berlin, Conn., at $23,993. The bridge will be 470 ft. long. Noted Nov. 19, Dec. 3 and 10.

Northampton, Mass.—The Commissioners of Hampshire County have had tentative plans prepared for the proposed bridge over the Connecticut River, by John R. Worcester & Co., 79 Milk St., Boston. The cost is estimated at $200,000. Noted Dec. 18, 1913.

Middletown, Conn.—The Board of Selectmen plans to begin work in the early spring on a concrete bridge connecting Middletown with South Farms, to replace the present steel structure. It is reported that the piers of the old bridge will serve for the new one. The bridge will be 68 ft. long and 26 ft. wide. The cost is estimated at from $4000 to $5000. J. M. Lucey is City Engr.

Ballston Spa, N. Y.—The taxpayers of the Town of Ballston have voted in favor of appropriating $6800 for the construction of a new bridge over Mourning Kill. This bridge will be a part of the new state highway to be built from Dunning St. to V. Corners.

★Wawarsing, N. Y.—(Official)—Bids will be received until 11 a.m., Jan. 16, by the Town Board of the Town of Wawarsing, Ulster County, at the Town Hall, Ellenville, N. Y., for the construction of a steel highway bridge, 197 ft. long, across Rondout Creek. Silas S. Shurter is Town Supt. of Highways, Town of Wawarsing.

Jersey City, N. J.—The New Jersey & New York Bridge Co. has been incorporated for the purpose of building a bridge by private enterprise over the Hudson River between New York and New Jersey. Before arrangements can be made, however, Hudson, Essex and Bergen Counties, N. J., must cooperate in the plan, and at the present time, Bergen County only has announced itself as in favor of the project. The incorporators of the company are: J. Wilkes O'Neil, mayor of Bergenfield, W. M. Connell and Milton O. Jones, Bergenfield; John D. Holman, Malcolm Mackey, Tenafly; and Thomas Clendinnen, Fort Lee.

Leesport, Penn.—The Board of Commissioners of Berks County has submitted plans for a new reinforced-concrete bridge over the Schuylkill River, between Leesport and Ontelaunee Township, to the State Water Supply Commission for approval. Construction of the bridge will be begun as soon as permission is granted by the Commission. Charles F. Sanders, Reading, is County Engr. D. K. Hoch, Reading, is County Controller. Noted Dec. 17.

✚Morgantown, W. Va.—(Official)—The County Court of Monongalia County has awarded the contract for the construction of a 150-ft. reinforced concrete bridge at South Morgantown to COLE BROS. INC., 16 St. Paul St., Baltimore, Md., at $53,331. Other bidders were: E. J. Landor, Canton, Ohio, $55,010; H. J. Zevely, Morgantown, $61,509; H. C. Brooks Co. Inc., Martinsburg, W. Va., $63,915; Keeley Bros. & Gilmore, Clarksburg, W. Va., $66,604; Dravo Contracting Co., Pittsburgh, Penn., $67,256; Concrete Steel Bridge Co., Clarksburg, W. Va., $70,913; Farris Bridge Co., Charleston, W. Va., $71,305; Luten Bridge Co., York, Penn., $71,487; John F. Casey Co., Pittsburgh, Penn., $73,457; I. N. Weaver & Co., Morgantown, $87,905. The Monongahela Valley Engineering Co., Morgantown, is Engr.-in-Charge. Noted May 21 and Dec. 17.

Atlanta, Ga.—See item under "Miscellaneous," Fair Buildings.

Knoxville, Tenn.—The Board of Commissioners of Knox County will, it is reported, make an appropriation of $4000 to be used for replacing the present wooden bridges on Straw Plains Pike with reinforced-concrete structures. The Board will also appropriate $4000 for reflooring and repainting the Holston River Bridge.

Columbus, Ohio—(Official)—The Board of Commissioners of Franklin County has rejected all bids received for constructing approaches to the Williams Bridge in Perry, Norwich and Franklin Townships, as being above the Engineer's estimate. John Scott is Clk. of Comrs. Noted Dec. 10.

Delaware, Ohio—Contracts will be awarded about June 1, by the Board of Commissioners of Delaware County, for the construction of five steel bridges with concrete abutments. The estimated total cost is $100,000. Plans are being prepared by F. C. Higley, County Engr.

Toledo, Ohio—The City Council, on Dec. 28, authorized the issue of bonds, and directed the City Engineer to prepare plans for repaving the Fassett St. Bridge with wood blocks, at an estimated cost of $45,000. Noted Dec. 10.

Youngstown, Ohio—Bids will be received until Jan. 14, by the Commissioners of Mahoning County, for the sale of $40,000 in bonds, the proceeds of which will be used for the construction of a bridge across the Mahoning River at West Ave., Youngstown. Frank H. Vogan is Clk. of Comrs.

Ecorse, Mich.—The lowest bid received for the construction of a Scherzer rolling lift bridge over Ecorse Creek was that of the Toledo Bridge & Crane Co., Toledo, Ohio, at about $30,000. Noted Oct. 1 and 22.

★Chicago, Ill.—(Official)—Bids will be received until noon, Jan. 14, by John McGillen, Clk. of the Sanitary District of Chicago, Room 700, 910 South Michigan Ave., for the construction of the steel superstructures of two highway bridges over the Calumet-Sag Channel. For further information, see advertisement under "Contracts To Be Let."

Green Bay, Wis.—It is reported that plans have been prepared by A. Braun, City Engr., for a new bascule bridge over the Fox River at Main St., to cost about $170,000. It will be 535 ft. long, steel superstructure and concrete substructure and approaches. The date for receiving bids has not yet been fixed.

Milwaukee, Wis.—The Department of Public Works has been unable as yet to call for bids for the construction of the State-Martin St. Bridge, estimated to cost about $175,000, as no agreement has been made with the property owners for condemning real estate on the east approach in order to straighten the line of the bridge. The necessary appropriation has been available since July 1, and plans have been completed by the City Engineer. F. G. Simmons is Comr. of Pub. Wks. Noted Apr. 9, 1914.

Racine, Wis.—It is reported that bids will be asked about Mar. 15 by the Commissioners of Racine County for the construction of a steel bridge on concrete abutments to be located at Mount Pleasant, Racine County. James Mutter is Highway Comr. of Racine County.

✚Melrose, Minn.—The Commissioners of Stearns County, St. Cloud, Minn., have awarded the contract for the construction of State Bridge No. 1605 on State Road No. 1, to the M. ADAMS CO., Minneapolis, Minn. Noted Dec. 17.

Topeka, Kan.—Plans are being prepared by A. R. Young, City Engr., for a new reinforced-concrete bridge over Shunganunga Creek at Kansas Ave. The bridge will be about 100 ft. long and 30 ft. wide. The contract for its construction will be awarded soon after the first of the year, with the understanding that the Topeka Ry. Co. will pay one-half the cost, and in return will be permitted to use the bridge when its South Kansas Ave. extension is built.

✚David City, Neb.—The Board of Commissioners of Butler County has awarded the contract for bridge construction during 1915, to the NEBRASKA CONSTRUCTION CO., Lincoln, Neb.

Kearney, Neb.—It is reported that bids will be received until Jan. 25 by the City Clerk for the construction of a 46-ft. steel arch.

Elk Point, S. D.—(Official)—All bids opened Dec. 24 by the Commissioners of Union County, for county bridge construction during 1915, were rejected, and new bids for the work will be received until Mar. 2. Edward Holden is County Audr. Noted Nov. 5.

✚Beeville, Tex.—The Commissioners' Court of Bee County has awarded the contract for the construction of a three-span steel bridge over Toro Creek, to AUSTIN BROS., Dallas, at $3950; the contract for a concrete bridge over San Domingo Creek, near Normanna, was awarded to BAILEY MILLS, Victoria, Tex., at $2000.

✚Tulsa, Okla.—(Official)—The Board of Commissioners of Tulsa County has awarded the contract for the construction of two steel bridges with concrete floors to the OREGONIA BRIDGE CO., Lebanon, Ohio, and Oklahoma, Okla. Bids were received Dec. 7. Noted Nov. 26.

Seattle, Wash.—The Board of Public Works has approved plans for the trestle approaches to the 15th Ave. N. W., Bridge over the Lake Washington Canal. It is reported that bids for their construction will be asked at once. A. L. Valentine is Chn. Bd. of Pub. Wks. Noted Dec. 10.

✚**Spokane, Wash.**—The Board of Public Works has awarded the contract for the construction of a bridge from Sprague Ave. and Hilliard St. over the division freight house of the Northern Pacific Ry. to Division St. and Riverside, to R. T. LAWRENCE, Spokane, at about $20,000.

Portland, Ore.—It is reported that bids will be asked about Jan. 15 for the construction of the Holgate St. Viaduct for the Southern Pacific Co. It will extend from East 18th to East 23d St., and will consist of four 75-ft. steel spans, through girder type, with earth approaches. The estimated cost is $55,000. John R. Hanson is City Engr. Noted July 9, 1914.

✚**The Dalles, Ore.**—The contract for the construction of eight steel swing bridges over the Dalles-Celilo Canal has been awarded to the COWLITZ BRIDGE CO., Yeon Bldg., Portland, at $15,863. Also noted under Federal Government Work.

✚**Sanger, Calif.**—The following bids were received, Dec. 18, by the Board of Supervisors of Fresno County, Fresno, for the construction of a 400-ft. reinforced-concrete bridge over the Kings River above Sanger. A. Techert & Sons, $26,600; Clinton Fireproofing Co., $26,400; W. J. KETTLEWELL & SON, $19,680 (awarded contract); Thompson Bros., $21,900; Mercereau Bridge & Construction Co., $29,450; Johnson Bros., $21,440; Blake Bros., $24,400; Pacific Coast Construction Co., $22,400; Mesmer & Rice, $25,000. Noted Dec. 3 and 10.

✚The contract for constructing ten wooden pile bridges over the Kings River was awarded to W. F. JONES, at $10.70 a foot for all bridges. Other bidders were: Parlier Construction Co., $9063; Widley & Yost, nine bridges, $9700; Lovelace Bros., $9777; Thompson Bros., $9810; Johnson Bros., nine bridges, $11,258; Pacific Coast Construction Co., $8780; Mesmer & Rice, $12,597. D. M. Barnwell, Fresno, is County Clk.

✚**St. Catharines, Ont.**—(Official)—The City Council opened the following bids Dec. 8, for the construction of the St. Paul St. High Level Bridge: CANADIAN BRIDGE CO., Walkerville, Ont., $91,420 (awarded contract); Hamilton Bridge Works, Hamilton, Ont., $97,425; Dominion Bridge Co., Montreal, Que., $101,879; McGregor & McIntire, Toronto, $112,012; Canadian Allis Chalmers Co., Toronto, $122,448; Standard Steel Construction Co., Welland, Ont., $133,360. Noted Oct. 8, Nov. 19 and Dec. 24.

✚**Santo Domingo, Dominican Republic**—The Director General of Public Works has awarded the contract for the construction of a steel bridge over the Ozama River at Santo Domingo City, to JOSE TURULL, Santo Domingo City, at $91,237. List of bidders noted Dec. 31.

WATER-SUPPLY—IRRIGATION

✚**Springfield, Mass.**—The contract for c.-i. water pipe and fittings has been awarded by the Board of Water Commissioners to R. D. WOOD & CO., Philadelphia, Penn.

Warwick, R. I.—The town has retained O. Perry Sarle, Engr., Providence, to make an investigation for the construction of a water system. Noted Oct. 29.

✚**New Britain, Conn.**—The contract for pipe for the water department has been awarded to STANDARD PIPE & FOUNDRY CO., Bristol, Penn., at $5900.

Thompsonville, Conn.—A petition to the General Assembly has been filed with the Secretary of State by the Thompsonville Water Co. for permission to build dams across streams in the towns of East Granby, Enfield, East Windsor and Somers. H. R. Cooper is Supt. Noted Jan. 1, 1914.

Albany, N. Y.—W. Greenlach, Comr. of Pub. Wks., has recommended the installation of water meters for the entire system.

Barker, N. Y.—At an election held recently the property owners voted in favor of issuing $30,000 in bonds, the proceeds of which will be used for the installation of a water system. Noted Aug. 6.

New York, N. Y.—(Borough of the Bronx)—(Official)—Bids were received by the Department of Water Supply, Gas and Electricity for dismantling and transporting one pumping engine from the Baldwin Station to the 179th St. Station, and reërecting it, including foundations, as follows: Almirall & Co., $7317; Henry E. Fox Contracting Co., $7900; Frank I. Eisinger, $7953; McHarg & Barton Co., $8272; and Christopher Nally, 710 Columbus Ave., New York (low bidder) at $6875.

New York, N. Y.—(Official)—Bids will be received by the Board of Water Supply, Municipal Bldg., Manhattan, until 11 a.m., Jan. 19 for Contract 162, for 8000 squares of face cutting of stones for Kensico dam. Charles Strauss is Pres.

✚**Newark, N. J.**—The city has awarded the contract to P. H. & J. CONTON at about $5000 for constructing a tank and tower at the new city almshouse at Ivy Hill. Noted Nov. 19.

Pittsburgh, Penn.—(Official)—Bids will be received until 10 a.m., Jan. 8, by the City Controller for a boiler feed pump, heater and appurtenances for the Herron Hill Pumping station under Contract No. 2-E for the Bureau of Water. Robert Swan is Dir. Dept. of Pub. Wks.

✚**Baltimore, Md.**—The contract for c.-i. pipe and specials for the water department has been awarded to WARREN FOUNDRY & MACHINE CO., Phillipsburg, N. J., at $157,643.

✚The contract for calcium hypochlorite for treating water in the reservoirs has been awarded to THOMSEN CHEMICAL CO., Baltimore, at $9765.

Chestertown, Md.—The Water Board plans to build an elevated tank, estimated to cost $25,000. Hugh Downing, Dover, Del., is Engr.

Laurel, Md.—Bids will probably be received in January for making extensions to the water system and for installing a filtration plant. Harry Stevens, Union Trust Bldg., Washington, D. C., is Engr. H. S. Phelps is Clk. Noted June 4.

Clarksburg, W. Va.—(Official)—The city plans to install a new high lift pump and to build a storage dam for the water system this year. Scotland G. Highland is Secy. and Gen. Mgr.

Asheville, N. C.—(Official)—The city plans to lay 6000 ft. of 10-in. water mains in College St. to intersect with the water main for Grove Park Section. William Francis is Supt.

North Augusta, S. C.—The North Augusta Water & Gas Co. has been incorporated by W. R. Dawson and C. R. Dawson, with a capital of $50,000.

Jacksonville, Fla.—See item under "Miscellaneous," Harbor Improvements.

Tampa, Fla.—According to press reports plans have been prepared by C. C. Whitaker, Engr., Atlanta, Ga., for the construction of a reinforced-concrete reservoir for the Tampa Water Works Co. The estimated cost is $40,000. Noted July 16.

Marion, Ky.—(Official)—Bids will probably be received about Feb. 1 by the Marion Water & Ice Co. for the construction of a water system. Noted Dec. 17.

Cleveland, Ohio—(Official)—Bids were received Dec. 24 for two 100,000-gal. and one 60,000 gal. low-lift steam-turbine reduction-gear driven centrifugal pumps at the Division Ave. pumping station: Dravo Doyle Co., Pittsburgh, Penn., $129,667, alternate bid, $134,750; and Allis-Chalmers Mfg. Co., Milwaukee, Wis., $129,950.

✚The contract has been awarded to R. D. WOOD & CO., Philadelphia, Penn., at $25,545, for fire hydrants and sluice gates for the Department of Water. Bids opened Dec. 18. Noted Dec. 17.

Coshocton, Ohio—A resolution has been passed by the City Council declaring it necessary to construct a 3,000,000-gal. reservoir hill. Chester & Fleming, Union Trust Bldg., Pittsburgh, Penn., are the Engrs. Noted July 16 and Dec. 24.

Fostoria, Ohio—The City Council has decided to build a reservoir, a softening plant and a filtration plant. Charles A. Latshaw is City Engr. Noted Sept. 17.

Toledo, Ohio—The William J. Sherman Co., Nasby Bldg., Toledo, has submitted plans for the high-pressure pumping station. The plant will be located near the Cherry St. bridge. The estimated cost is $175,000. Noted July 9.

✚✚**Chicago, Ill.**—(Official)—The contract for constructing Section 1 of the Wilson Ave. water tunnel has been awarded by the City of Chicago to FITZSIMMONS & CONNELL DREDGE & DOCK CO., 10 South La Salle St., Chicago, at $403,179. List of bids noted Dec. 17.

✚**Kansas, Ill.**—The contract for constructing a distributing system has been awarded to T. A. HARDMAN, Olney, at $8352. C. L. James, Mattoon, is Engr.

✚**Rock Island, Ill.**—The contract for laying water mains in a number of streets has been awarded to P. F. TRENKENSCHUH, at $13,735.

Antigo, Wis.—It is reported that the Wolf River Improvement Co. intends to push work on its reservoir project during the spring and summer. Plans call for a concrete dam, 26 ft. high in the town of Ainsworth, to flood 18,000 acres, and a 20-ft. concrete dam in the town of Elcho to flood 19,500 acres. Both dams are to be equipped with gates for regulating the flow into Fox River and Winnebago Lake.

Pretty Prairie, Kan.—An election will be held Jan. 18 to vote on the question of issuing bonds for $17,000, the proceeds of which will be used for the installation of a water system. Rollins & Co., Kansas City, Mo., is preparing plans. Noted Dec. 24.

Harlowton, Mont.—(Official)—Plans are being prepared by the Garharz-Jaqueth Engineering Co., Great Falls, for the construction of a water system. The plans will not be ready before Feb. 1. Noted Aug. 13 and Dec. 17.

Kansas City, Mo.—According to press reports the Fire and Water Board is in the market for 1400 tons of 6-, 8- and 12-in. c.-i. pipe. John Donnelly is Pres. of the Bd.

✚**Little Rock, Ark.**—The contract for building a brick superstructure over its present plant has been awarded by the Arkansas Water Co. to CRAWFORD-WILLIAMSON CONSTRUCTION CO., Memphis, Tenn., at $20,000. Noted Feb. 26, 1914.

✚**Big Spring, Tex.**—The contract for laying about 25,000 ft. of water mains has been awarded to E. L. DALTON, Dallas, Tex. Noted Dec. 3.

Denton, Tex.—An election will be held, Feb. 2, to vote on the question of issuing $114,000 in bonds, the proceeds of which will be used for making extensions to the water and light systems, constructing school buildings, for fire department apparatus and for street improvements.

Mission, Tex.—The City Commission contemplates calling an election in February to vote on the question of issuing bonds, the proceeds of which will be used for the construction of a water system and electric-light plant. Willard Ferguson is Mayor.

★**Sweetwater, Tex.**—(Official)—Bids will be received until 2 p.m., Jan. 20, by the City of Sweetwater, for erecting a 250,000 gal. cylindrical steel stand pipe, 28 ft. in diameter and 60 ft. high. George T. Wilson is Mayor. Noted Dec. 10.

★(Official)—Bids will be received until 2 p.m., Jan. 20, by the City of Sweetwater for the construction of a 12-in. c.-i. gravity conduit from Lake Trammell to Sweetwater. The estimated cost is $16,000. Plans are on file with W. H. Bartlett, City Secy. Noted Dec. 10.

Guthrie, Okla.—An election will be held Jan. 14 to vote on the question of issuing $50,000 in bonds, the proceeds of which will be used for making extensions to the municipal water system. J. E. Nisley is Mayor.

Oklahoma, Okla.—An election will be held Jan. 15 to vote on the question of issuing $240,000 in bonds, the proceeds of which will be used for the construction of reservoirs. Guy V. McClure is City Engr. Noted Nov. 5.

Payette, Idaho—(Official)—W. C. Sturdevant, City Engr. informs us that the bond issue for the construction of a filtration plant was defeated at the November election and not carried as was erroneously noted Dec. 17.

Grandview, Wash.—Bids will be received until Jan. 12 by the Grandview Irrigation District for the purchase of $67,000 in bonds, the proceeds of which will be used for the construction of an irrigation system.

Port Townsend, Wash.—Bids will be received about Jan. 9 by George Anderson, City Clk., for placing a c.-i. pipe line across and under the canal at the head of Port Townsend Bay.

Milwaukee, Ore.—The Council has passed an ordinance authorizing the construction of a water main to the limits of Portland to connect with the Portland water system. Noted May 21.

†Oroville, Calif.—The contract for excavating four miles of the irrigation canal of the Feather River Canal Co. has been awarded to DANIEL BAYLESS, Biggs.

Sacramento, Calif.—Charles G. Hyde has been recommended by Frank C. Miller, City Engr., and others, to prepare plans for the construction of a chlorinating plant. Noted July 2.

Montreal, Que.—The contract has been readvertised and bids are being received until Jan. 12 by the Board of City Commissioners for constructing the Elgin Basin pumping station. L. N. Senecal is Secy.

Victoria, B. C.—According to press reports the City Council has raised $130,000 to be used to commence the construction of the Sooke Lake water project. Du Cane & Dutcher, Rogers Bldg., Vancouver, are the Consult. Engrs. Noted Nov. 26.

Athens, Greece—(Official)—Bids will probably be received until Mar. 15 for the construction of a water and a sewer system for Athens and the Piraeus. Specifications are on file with the Department of Commerce, Washington, D. C. S. Schliemann is the diplomatic representative of Greece to this country, located at Washington, D. C.

SEWERS

Boston, Mass.—Bids will be received until Jan. 12 by the Public Works Department for constructing drains in four streets. L. K. Rourke is Comr.

†Westfield, Mass.—The contract has been awarded to C. C. GAMEWELL, Pittsfield, Mass., for constructing $10,000 ft. of vitrified sewer pipe from 6- to 24-in. pipe, at 79% of standard.

Stamford, Conn.—Bids were received as follows for the construction of a sewage disposal plant: F. N. Lewis, New York, N. Y., $69,315; Suburban Engineering Co., New York, N. Y., $71,304; Young & Hyde, New York, N. Y., $75,808; Harris Construction Co., Stamford, $84,595; Daly & Merritt, Port Chester, N. Y., $86,786; and W. B. Eyrich, Grantwood, N. J., $92,018; James C. Harding, 170 Broadway, New York, N. Y., is Engr.

Buffalo, N. Y.—(Official)—Bids will be received until 11 a.m., Jan. 12, by Francis G. Ward, Comr. of Pub. Wks., for constructing sewers in the following streets: Dutton, Angle, Health St., Woodside and Potters Rd., Evelyn, Eckhert, Newfield and Newburg St. Noted Dec. 10.

Jersey City, N. J.—The State Board of Health, Trenton, has ordered the city to construct sewage disposal works to be completed during 1915. Henry Byrne is Dir., Dept. of Sts. and Pub. Impvts Noted Dec. 24.

†★North Plainfield, N. J.—(Official)—The contract for constructing, under Contract 1, the outfall sewer, has been awarded by the Borough of North Plainfield to HARRISON & BURTON, 220 Broadway, New York, N. Y., at $72,598, and the contract for constructing a collecting system under Contract 2 has been awarded to FRANK PUGLIA, Paterson, at $70,817. List of bids noted Dec. 31.

★Paterson, N. J.—(Official)—Bids were received Dec. 29 by the Passaic Valley Sewerage Commissioners for constructing Section 17 of the Central Portion of the Main Intercepting sewer as follows: New York & New Jersey Construction Co., Newark, $179,531 (low bidder); Litchfield Construction Co., Brooklyn, N. Y., $181,333; Harrison & Craig Co., Newark, $199,364; Merrill-Ruckaber Co., New York, N. Y., $201,184; Culp Co., Inc., Paterson, $222,116; Cauldwell-Wingate Co., New York, N. Y., $236,983; and Arthur McMullen, New York, N. Y., $281,492. Noted Dec. 2.

Rahway, N. J.—The Common Council has purchased property on Haydock St. as a site for a sewage disposal plant. Noted Nov. 12.

Allentown, Penn.—The Council has purchased a site near the city and plans to build a sewage disposal estimated to cost $100,000. Charles D. Weirbach is City Engr.

Parkesburg, Penn.—Bids will be received about Mar. 1, by George Mullen, Secy. of the Council, for a sewer system and sewage disposal plant. The estimated cost is $25,000. F. H. Shaw, Lancaster, is Engr. Noted Dec. 17.

Columbia, S. C.—Bonds have been voted by the citizens, the proceeds of which will be used for the extension of the sewer system. L. A. Griffith is Mayor.

★Augusta, Ga.—(Official)—See item under "Miscellaneous." Levee, also advertisement under "Contracts to Be Let."

Vineville (Macon post office), **Ga.**—A sewer system will be constructed through the property of the Suburban Realty Co. C. A. Caldwell, Georgia Academy for Blind, is Engr. The estimated cost is $12,000. Noted Oct. 8, under Macon.

Birmingham, Ala.—The Board of Commissioners has adopted an ordinance authorizing the construction of sanitary sewers in the vicinity of East Woodlawn and Gate City at an estimated cost of $21,000, and for sewers in Enon Ridge at an estimated cost of $12,000. Julian Kendrick is City Engr.

★†Canton, Ohio—(Official)—The contract for constructing the main sewer to the new sewage disposal plant has been awarded to JOHN F. CASEY CO., Pittsburgh, Penn. Item bids will appear in a future issue. Noted Nov. 5.

Dayton, Ohio—Press reports state that the City Commission contemplates issuing $40,300 in bonds for constructing sewers in Berm, Grafton, Norman and Wyoming St., and Burton Ave.

Oakwood, Ohio—Press reports state that bids will be received until Jan. 23, by the Village Clerk, for the sale of $21,000 in bonds for sewer work.

Cadillac, Mich.—At a recent election the citizens voted in favor of issuing $65,000 in bonds for a sewage disposal plant. Noted Dec. 17.

Green Bay, Wis.—Plans are being prepared by A. Brauns, City Engr., for the construction of about 1100 ft. of trunk sewers in the spring.

†Cherokee, Iowa—A contract for constructing an extension to the sanitary sewer system has been awarded to ARTHUR A. DOBSON, Lincoln, Neb.

Lenox, Iowa—Plans are being prepared by Theodore S. De Lay, Creston, Iowa, for a sewer system to be constructed during 1915.

Duluth, Minn.—Press reports state that the City Council has approved the plans for the sanitary sewer system to be constructed in New Duluth and Gary, estimated to cost $153,000. The first section will be constructed this winter and will cost $35,000. John Wilson is City Engr. Noted Dec. 10.

Sandstone, Minn.—Bids will be received by the Village Recorder until Jan. 18, for constructing sewer system.

Roundup, Mont.—The City Council has accepted and approved of plans prepared by C. A. Renshaw, Engr., for a sewer system for the city. Bonds for the improvement have been sold, and bids for work will be called in February. Noted Sept. 1 and Oct. 29.

†Blytheville, Ark.—It is reported that a contract for sewer work has been awarded to A. C. BROOKS, Birmingham, Ala., at $54,200.

Harrison, Ark.—An election will be held Feb. 22 to vote on the question of issuing $90,000 in bonds for installing a sewer system. A. C. Moor, Joplin, Mo., is Engr. Noted Nov. 5.

Pueblo, Colo.—(Official)—See item under Streets and Roads.

Aberdeen, Wash.—Plans are being prepared by Lewis D. Kelsey, City Engr., for the construction of trunk sewers in Sumner, Jeffries, Martin, Duffy and other streets, estimated to cost $40,000.

†Seattle, Wash.—A contract for constructing a sewer in Eli Ave. has been awarded to L. COLLUCCIO, 1642 Lane St., at $20,879. Noted Dec. 24.

Corning, Calif.—A special election will be held Jan. 12 to vote on the question of issuing $24,000 in bonds for extending the sewer system.

El Centro, Calif.—The City Council contemplates constructing a sewer system. F. H. Olsmtead, Los Angeles is Engr.-in-Charge.

Hayward, Calif.—The citizens of Ora Loma District will vote Jan. 16 on the question of issuing $62,000 in bonds for sewerage construction.

Stockton, Calif.—(Official)—E. C. Grunsky, Engr., San Francisco, advises us that he is about to submit plans for the extension of the sewer system and for the construction of a sewage disposal plant. Noted Dec. 24.

London, Ont.—The City Council has authorized work to be started at once on additional storm and sanitary sewers, estimated to cost $14,000. H. A. Brazier is Engr.

Stratford, Ont.—Plans and estimates have been submitted by A. B. Manson, City Engr. for constructing a main sewer from the sewage disposal plant to Romeo St., estimated to cost $70,000.

Toronto, Ont.—A by-law has been passed by the York Township Council for the construction of sewers in Oakwood and Conway St., estimated to cost $8000 and $3000, respectively. J. Barber, 57 Adelaide St., Toronto, is Engr. and W. A. Clarke, 40 Jarvis St., is Township Clk.

Athens, Greece—See item under "Water Supply—Irrigation."

GARBAGE

†Rutherford, N. J.—The city has awarded the contract for the removal of garbage and ashes for a period of three years to MICHAEL DONOVAN, Bayonne, N. J., at $14,000.

†Aspinwall, Penn.—The Boro Council, Dec. 21, awarded the contract for the collection and disposal of garbage for a period of five years to WALKER, STRATMAN CO., Pittsburgh, at $12,425.

Columbus, Ga.—Mayor John C. Cook, in his annual message, recommended the construction of a garbage disposal plant.

Miami, Fla.—The city will build a destructor plant under the supervision of B. H. Klyce, City Engr. Excavation and concrete work will be sublet. The estimated cost is $16,000. Noted Nov. 5.

Baton Rouge, La.—The city is considering several sites upon which to construct the proposed garbage incinerator. The superintendent of the Nye Odorless Cremator Co., it is reported, is assisting the commissioners in selecting the most suitable location.

Chicago, Ill.—Local press reports state that the city contemplates an issue of $750,000 in bonds for the construction of a garbage disposal plant.

Longbeach, Calif.—(Official)—Mayor Louis N. Whealton writes that the city is trying to solve the problem of garbage disposal.

STREETS AND ROADS

†Boston, Mass.—The contract for building a macadam roadway in Intervale St. from Columbia Rd. to Normandy St. has been awarded to J. C. COLEMAN & SONS CO., at $6442. Noted Dec. 24.

According to press reports, the City Council contemplates repaving a large portion of Albany and Tremont St. and also to pave Dorchester Ave. with wood blocks. L. K. Rourke is Comr. of Pub. Wks.

Providence, R. I.—(Official)—Bids were received Dec. 28 by the Board of Contract and Supply for paving, as follows: (A) Broad St., (B) Messer St., (C) Knight St., (a) asphalt, (b) bitulithic: Narragansett Improvement Co., (A) (a) $117,373, (B) (a) $18,656, (C) (a) $14,712; Borough Asphalt Co., (A) (a) $119,980, (b) $118,937, (B) (a) $19,260, (b) $19,073, (C) (a) $15,243, (b) $15,097; Daniel O'Connell's Sons, (A) (a) $138,149, (B) (a) $22,685, (C) (a) $17,897; Warren Bros. Co., (A) (b) $118,892, (B) (b) $19,631, (C) (b) $15,568. Noted Dec. 24.

Woonsocket, R. I.—The Committee on Streets and Roads has rejected all bids for paving Pond St. New bids will be called for later. F. A. Mills is City Engr. Noted Dec. 10.

Hartford, Conn.—Bids were received by the State Highway Commission Dec. 31, as follows:

East Lyme Township (Niantic post office)—About 4344 lin.ft. of (a) special gravel, (b) native stone macadam, (c) 8-in. gravel, on the Niantic-Blackhall Highway: A. D. Bridges Sons, Inc., Hazardville, Conn., (a) $8365, (b) $12,362, (c) $10,189; A. B. Caldwell, New Britain, Conn., (a) $8297, (b) $13,194, (c) $10,864; Board of Selectmen, Town of East Lyme, F. A. Beckwith, Chn., Niantic, Conn., (a) $9498; Bryan F. Maham, New London, Conn., (a) $10,174, (b) $14,700, (c) $11,052; John Arborio, 172 Congress Ave., New Haven, Conn., (a) $10,513, (b) $14,361, (c) $11,392.

Greenwich Township—Construction of an earth fill on the Boston Post Rd.: Daly & Merritt, Port Chester, N. Y., $3783; Charles A. R. Bruno, 217 Charles St., Bridgeport, Conn., $5049; Angelo Roina, Greenwich, Conn., $3767; Joseph Christiano, Greenwich, Conn., $4134; T. F. Foley & Co., South Norwalk, Conn., $4720; C. E. Williams, New Milford, Conn., $4405.

Norwich Township—Resurfacing about 3177 lin.ft. of highway on West Town St.: William B. Wilcox, Norwich, Conn., $6401.

New York, N. Y.—(Borough of Brooklyn)—(Official)—Bids will be received by L. H. Pounds, Pres. of the Borough, until 11 a.m., Jan. 13, for improving Avenue C from Gravesend Ave. to West St., Dumont Ave., East 15th St. from Avenue O to Kings Highway, West St. from Church Ave. to 39th St., 15th Ave. from 40th to 42d St., 45th St. from 13th to 14th Ave., 50th St. from 13th to 14th Ave., 67th St. from 14th to 15th Ave., 70th St. from 13th to 15th Ave. and 71st St. from Fort Hamilton Parkway to 10th Ave.

Hackensack, N. J.—Bonds for $25,000 were sold Dec. 30, the proceeds of which will be used for improving roads.

Newton, N. J.—The Board of Freeholders is negotiating with the State Road Commissioner for the adoption of the following specifications for the proposed improved road from Newton to Ogdensburg: 24-ft. roadway, with macadam roadway 12-ft. wide.

Perth Amboy, N. J.—The City Council has authorized the preparation of an ordinance providing for the paving of Front St., from Fayette to Market St., with belgian blocks.

Latrobe, Penn.—Bids will be received by the Commissioners of Westmoreland County until Jan. 11 for the sale of $250,000 in bonds for road improvements.

Wilmington, Del.—The City Council will grade 10th, 11th and King St. at an estimated cost of $25,000.

Pittsboro, N. C.—At an election recently held, the citizens voted in favor of issuing $20,000 in bonds for roads in Haw River Township.

+Quitman, Ga.—A contract for paving has been awarded to C. A. COLLACOT, Chattanooga, Tenn., at $35,000. Noted Sept. 24.

Brooksville, Fla.—Bids will be received by the County Commissioners until Jan. 9 for the purchase of $300,000 in bonds for highway construction.

+St. Augustine, Fla.—Press reports state that the contract for paving Cincinnati Ave. has been awarded to SETH PERKINS & SONS. Noted Dec. 10.

+Tampa, Fla.—The contract for paving Massachusetts Ave. and Park St. with brick has been awarded to the EDWARDS CONSTRUCTION CO.

+Columbiana, Ala.—A contract for grading and draining the road from Vandiver, Shelby County, to the Jefferson County line, has been awarded by the Commissioners of Shelby County to ISAAC ELLARD, Birmingham, Ala., at $6542. Noted Dec. 10.

Vernon, Ala.—Press reports state that the citizens of Lamar County voted in favor of issuing $75,000 in bonds for constructing roads. Noted Dec. 10.

Collins, Miss.—According to press reports, the Board of Supervisors has authorized $16,000 in bonds for roads.

Alexandria, La.—Press reports state that the citizens of Rapides Parish Road District No. 2 will vote Jan. 19 on the question of issuing $100,000 in bonds for road construction.

New Orleans, La.—(Official)—Bids will be received by the Highway Department of the Board of State Engineers, Room 104, New Orleans Court Bldg., until noon, Jan. 30, for constructing the Baton Rouge-Clinton, Baton Rouge-Greensburg and Baton Rouge-St. Francisville Rd. W. E. Atkinson is State Highway Engr.

Johnson City, Tenn.—At an election held Dec. 12 the citizens voted in favor of issuing $30,000 in bonds for road improvements.

Barbourville, Ky.—The citizens of Knox County will hold an election, Mar. 15, to vote on the question of issuing $200,000 in bonds for road construction.

Niles, Ohio—Arrangements are to be made for paving Mason, Wood, Girard, Erie, Maple, Neal, Mill, Water, Third, Holford and Federal St. early in the spring.

Painesville, Ohio—At a recent election the question of issuing $10,000 in bonds for street paving was defeated.

Salem, Ohio—Plans will be submitted by D. M. French, City Engr., to the City Council, for the improvement of West Dry St.

Tiffin, Ohio—The City Council contemplates paving a portion of Wentz, Coe and West Market St. with brick on a crushed stone foundation. J. J. Oberlander is City Engr.

+Newcastle, Ind.—(Official)—A contract for constructing a county line highway has been awarded by the Commissioners of Henry, Fayette and Rush Counties to HOPPES & JOHNSON, Anderson, Ind., at $13,864. Noted Dec. 10.

+South Bend, Ind.—A contract for constructing a gravel road in Penn and Portage Townships has been awarded by the Commissioners of St. Joseph County to HOMER SHORT, North Judson, Ind., at $7835.

Rock Island, Ill.—Press reports state that the Board of Local Improvements has decided to pave 18th Ave. with brick instead of asphalt. The estimated cost is $26,000.

New London, Wis.—Press reports state that the City Council contemplates an expenditure of $30,000 for street improvements.

Prairie Du Chien, Wis.—The City Council has voted to pave a portion of Bluff St.

Lincoln, Neb.—Press reports state that plans are being prepared for paving Holdredge St. with asphalt. Theodore H. Berg is City Clk.

Hardin, Mont.—According to press reports, plans have been completed for street paving in District No. 2, estimated to cost $40,000.

Chillicothe, Mo.—The City Council has ordered the repaving of a section of South Locust St.

+Kansas City, Mo.—The contract for paving 27th St. from Lister to Van Brunt St. with concrete has been awarded to the TYNER CONSTRUCTION CO., at $10,207.

Devall Bluff, Ark.—Bonds for $60,000 have been sold, the proceeds of which will be used for roads in Prairie County Road Improvement District No. 1.

Bay City, Tex.—Bids will be received by the County Judge until Jan. 11 for the sale of $30,000 in bonds for constructing and improving roads in Road District No. 1.

Belton, Tex.—According to press reports, bids will be received by the Commissioners Court of Bell County until 10 a.m., Jan. 13, for the sale of $105,000 in bonds for constructing and improving roads in Road District No. 7. W. E. Hall is County Audr.

Boerne, Tex.—At the election held Dec. 18, the citizens voted in favor of issuing $25,000 in bonds for constructing roads in Precinct No. 1.

Corpus Christi, Tex.—According to press reports an election will soon be held to vote on the question of issuing $100,000 in bonds for street paving.

+Dallas, Tex.—The contract for paving South Pearl St. from Elm to Taylor St. has been awarded to ROACH-MANIGAN PAVING CO. at $40,00.

El Paso, Tex.—Press reports state that the City Council contemplates an expenditure of $53,450 for brick paving.

Mission, Tex.—The City Commission is receiving bids for the construction of about 18,000 lin.ft. of concrete sidewalks, gutters and curbs, the cost of which will be about $30,000.

+San Antonio, Tex.—The contract for paving Woodlawn Ave. from Houston St. to the Fredericksburg Rd. has been awarded to the TEXAS BITULITHIC CO., Dallas.

Waco, Tex.—Press reports state that an election will be held Jan. 22 to vote on the question of issuing $15,000 in bonds for paving streets.

Wharton, Tex.—Press reports state that bonds for about $275,000 have been sold, the proceeds of which will be used for constructing roads in District No. 1, Wharton County.

Pueblo, Colo.—(Official)—We have been advised by D. R. Gaymon, City Engr., that the city contemplates spending $185,000 for improving the Mineral Palace Paving District by paving, curbing and constructing sewers.

Bonners Ferry, Idaho—Bids will be received by the Board of County Commissioners until Jan. 13 for constructing a section of road No. 48 in Road District No. 28. R. S. McCrea is Clk.

Davenport, Wash.—The Commissioners of Lincoln County contemplate an expenditure of $46,000 for road work in the spring.

Montesano, Wash.—Press reports state that the Commissioners of Chehalis County contemplate an expenditure of $335,000 in the spring for constructing highways.

Prosser, Wash.—The construction of the Kennewick-Finley Rd. has been postponed indefinitely by the County Commissioners. Noted Dec. 3.

+Bandon, Ore.—A contract for grading, paving and constructing sidewalks and gutters has been awarded to W. H. WEBB at $11,900.

Manhattan Beach, Calif.—Bids will be received until 7:30 p.m., Jan. 20, for improving Eighth St. M. M. Murray is City Engr.

+Ontario, Calif.—THE HIGHWAY CONSTRUCTION CO., San Bernardino, has been awarded the contract at $58,138.58 for improving Euclid Ave. between G St. and the north city limits. Noted Dec. 10 and 24.

+Sacramento, Calif.—The State Highway Commission has awarded contracts for the construction of State highway as follows: Colusa County, between Williams and Colusa, 8.4 miles, to C. W. CROSS, Oakland, Calif., at $55,061; in Siskiyou County, between Hornbrook and Yreka, 16.9 miles, to E. T. JOHNSON, Portland, Ore., at $90,522; in Orange County, from San Juan Capistrano to Galivan, 5.5 miles to the M. R. CONSTRUCTION CO., Los Angeles, Calif., at $35,830; Los Angeles County, between Section 17 and the Liebre Mountain, 14.5 miles, to the LEE MOOR CONSTRUCTION CO., Los Angeles, Calif., at $281,646, this contract to be completed within 150 days. Noted Dec. 3 and 31.

+San Diego, Calif.—J. E. CLOUSE has been awarded the contract at $9911.75 for improving Pescadero St. from De For to Santa Barbara St.

+San Francisco, Calif.—A contract for paving the Great White Way has been awarded to the BLANCHARD-BROWN CO. at $59,156.

†San Francisco, Calif.—Contracts have been awarded for paving San Bruno Ave. from Steuben St. to Oakdale Ave. to the FEDERAL CONSTRUCTION CO., at $38,658 and Fifth Ave. from Fulton to Geary St. to F. R. RITCHIE & CO., at $12,000.

†Tulare, Calif.—The City Trustees have awarded a contract for paving 17 blocks to the FEDERAL CONSTRUCTION CO., San Francisco, at $90,494.

Point Grey, B. C.—The lowest bid received for paving University Ave. was that of Ledingham & Cooper, at $23,570.

Saanichton, B. C.—According to press reports work will soon be started on road improvements, estimated to cost $30,000. Hector S. Cowper is City Clk.

INDUSTRIAL WORKS

†Cambridge, Mass.—The contract for the construction of a two-story, 50x100-ft. factory at Hamilton St., for the Boston Surburban Real Estate Co., Old South Bldg., Boston, has been awarded to H. E. SNOW, 169 Western Ave., Cambridge.

Olneyville, R. I.—The J. & K. Worsted Co., Providence, will construct a one-story, 62x272-ft. mill, on Hartford Ave. John H. Jones is Pres.

†Bridgeport, Conn.—The contract for the construction of a three-story, 42x72-ft. plant, on Connecticut Ave., for the Bridgeport Pattern & Model Co., has been awarded to CHARLES A. BJORKLUND.

Camden, N. Y.—The Hydraulic Turbine Co., recently incorporated with a capital of $1,000,000, plans the expenditure of $250,000 for the construction and equipment of a plant. Russell S. Johnson is Pres.

Endicott, N. Y.—Plans are being prepared by the Endicott-Johnson Co. for the construction of a three-story, 100x200-ft. warehouse.

Syracuse, N. Y.—Bids will soon be received by H. W. Tamkin, City Engr., for the construction of a three-story and basement, 66x124-ft. warehouse, at Tracy and Wilkinson St. Estimated cost, $40,000.

Camden, N. J.—Plans have been prepared by Ballinger & Perrot, Archs., Philadelphia, Penn., for the construction of an eight-story, fireproof concrete office building, at Cooper St., opposite City Park, for the Victor Talking Machine Co. Estimated cost, $500,000. Noted Sept. 10, Sept. 24 and Nov. 19.

Plans have been prepared by William Steel & Sons Co., Archs., Philadelphia, Penn., for the construction of a five-story, 250x600-ft. brick and reinforced-concrete factory and a 300x640-ft. brick and reinforced-concrete warehouse, at Washington Park, for the Joseph I. Campbell Soup Co., Camden.

†Newark, N. J.—The contract for the construction of a two-story, 50x150-ft. factory for Hermann Morris & Co. has been awarded to FRANCIS McCUE. The plant was recently destroyed by fire.

West Orange, N. J.—Thomas A. Edison, Inc., Belmont Ave., Silver Lake, N. J., plans to rebuild its plant, recently destroyed by fire, at Lakeside Ave. and Valley Rd., West Orange. Estimated cost, $1,000,000.

Glassport, Penn.—The Allegheny By-Product Coke Co. plans the expenditure of $100,000 on improvements to its plant. Construction to begin about Jan. 15. John F. Nicol is Mgr.

Philadelphia, Penn.—George H. Taber, Pittsburgh, has purchased a site on Stuart and Penrose Ave. containing 13½ acres, for the construction of a manufacturing plant.

†Baltimore, Md.—The contract for the construction of a nine-story, 33x76-ft. factory for Morrow Bros. has been awarded to the TOWNSEND GRACE CO. Estimated cost, $80,000. Noted Sept. 17.

Bogalusa, La.—The Great Southern Lumber Co. plans the construction of a $1,000,000 byproducts plant and the remodeling of its paper mill. W. H. Sullivan is Gen. Mgr.

Baton Rouge, La.—The Sinclair Oil Co., Tulsa, Okla., plans the construction of an oil refinery at Baton Rouge. Estimated cost, $5,000,000.

†New Orleans, La.—The CORRUGATED BAR CO., St. Louis, Mo., has been awarded the contract for supplying 6,000,000 lb. of steel bars and reinforcing work for the municipal cotton warehouses and a terminal. Estimated cost, $100,000. Noted Nov. 5, Dec. 24 and Dec. 31.

Memphis, Tenn.—H. W. Brennan is conducting a campaign, in Memphis, to raise $1,500,000 for the construction of a cotton mill. The Business Men's Club of Memphis is interested.

Covington, Ky.—The Reliance Textile & Dye Works has had plans prepared for the extension of its dyeing and finishing plant. Estimated cost, $25,000.

Louisville, Ky.—Plans have been prepared for the construction of a six-story, reinforced-concrete assembling plant for the Ford Motor Co., Detroit, Mich. The site contains 20,000 sq.ft.

Cleveland, Ohio—The Metals Welding Co. has increased its capital from $50,000 to $75,000, for the construction of a 35x130-ft. addition to its plant on Perkins Ave.

The Morgan Lithographing Co. plans the construction of a 170x250-ft. fireproof plant on Payne Ave. Estimated cost, $100,000.

Columbus, Ohio—The Jones Heel & Mfg. Co. has increased its capital from $30,000 to $75,000, for the construction of additions to its plant.

Massillon, Ohio—The Massillon Chair & Desk Co., recently incorporated with $300,000 capital, plans to construct a 100x250-ft. plant. Louis P. Manger is interested.

Chicago, Ill.—The Pullman Couch Co. has purchased a site for the construction of an eight-story, 100x159-ft. warehouse on State and 15th St. The estimated cost is $150,000 and construction will begin in the spring.

Chicago, Ill.—The Stewart-Warner Speedometer Co. will construct a six-story reinforced concrete addition to its plant at Diversey Parkway and Lincoln St. Estimated cost, $100,000.

†Manitowoc, Wis.—The contract for the construction of a 160x200-ft. coal storage plant and dock for the Manitowoc Land & Fuel Co. has been awarded to the WORDEN-ALLEN CO., Milwaukee. Estimated cost, $50,000.

Oconto, Wis.—Plans are being prepared for the construction of a two-story, 40x100-ft. grain elevator warehouse and mill for J. A. Urquart.

St. Paul, Minn.—Local press reports state that the Central Warehouse Co. plans the construction of a $200,000 warehouse in the Midway district.

Kansas City, Mo.—The Missouri Can Co., 1210 West Ninth St., recently destroyed by fire, with a loss of $75,000, plans to rebuild its plant.

Poplar Bluff, Mo.—The Querius Lumber Co., recently destroyed by fire, with a loss of $40,000, will rebuild its plant at Poplar Bluff.

Boise, Idaho—The Modern Box Mfg. Co., Saint Maries, Idaho, contemplates the construction of a $30,000 box factory at Boise. Frederick Wooden and E. A. Knight, Spokane, Wash., are interested.

Seattle, Wash.—L. Y. Stayton, 510 California Bldg., Tacoma, plans the construction of a reinforced-concrete pile manufacturing plant, near Seattle. Estimated cost, $250,000.

Port Arthur, Ont.—The Western Drydock & Shipbuilding Co. plans the construction of an addition to its plant. The estimated cost is $25,000.

New Westminster, B. C.—The Mackie Mill & Mercantile Co., Gettysburg, Wash., will construct a shingle mill, with a capacity of 200,000 shingles per day.

Port Alberni, B. C.—A. J. Waskett plans the construction of a $25,000 shingle mill at Port Alberni.

Tampico, Mex.—W. E. Nelson, Arch., Brownsville, Tex., is preparing plans for the construction of a brick warehouse for the Urguta Estate. The estimated cost is $30,000.

FEDERAL GOVERNMENT WORK

Repairs to Post Office—Providence, R. I.—The following are the bids received for making repairs to the post office at Providence: Thomas F. Cullinan Co., $6986; Household Cabinet Works, Providence, R. I., $6500; F. G. Kingston & Co., Providence, $5554; Horton & Hemenway, Boston, Mass., $5495; Hope Building Co., Providence, $5097.

†Storehouse—Washington, D. C.—The contract for constructing the storehouse at the Washington Navy Yard has been awarded to GEORGE E. WYNE, Washington, D. C., at $161,700. Noted Nov. 12 and Dec. 17.

Steel Towers—Washington, D. C.—Bids will be received by H. R. Stanford, Chief, Bureau of Yards and Docks, Navy Dept., Washington, D. C., until 11 a.m., Feb. 27, for constructing and erecting three 600-ft. steel towers at the following naval stations: San Diego, Calif.; Pearl Harbor, H. T., and Cavite, P. I.

Memorial—Washington, D. C.—See item under "Buildings."

★Steel Lock Gates—Wheeling, W. Va.—Bids will be received by Maj. T. H. Jackson, U. S. Engineer Offices, Wheeling, until 11 a.m., Jan. 30, for furnishing and erecting steel lock gates for Dam No. 15, Ohio River.

★Jetty Work—St. Petersburg, Fla.—The following are the bids received for building a stone jetty at the entrance to St. Petersburg Harbor: Edwards Construction Co., Tampa, Fla., $12,519; Simons-Mayrant Co., Charleston, S. C., $12,800. Noted Dec. 3.

Post Office—Middlesboro, Ky.—Bids were received as follows by Oscar Wenderoth, Superv. Arch., Treasury Dept., Washington, D. C., for the construction of a post office at Middlesboro, (a) stone-faced, light-colored limestone, (b) stone-faced, sandstone, (c) stone-faced, Bowling Green (Ky.) limestone, (d) brick-faced, stone base and trimmings of light-colored limestone, (e) sandstone, (f) Bowling Green limestone: John G. Unkefer & Co., Minerva, Ohio, (a) $62,840, (b) $74,340, (c) $68,340, (d) $62,000, (e) $69,840, (f) $65,340; William Everly, Indianapolis, Ind., (a) $66,747, (b) $68,106, (c) $66,420, (d) $63,871, (e) $64,873, (f) $63,471; George W. Stiles Construction Co., Chicago, Ill., (a) $67,474, (b) $71,974, (c) $69,812, (d) $65,752, (e) $69,128, (f) $68,348; William H. Fissell & Co., New York, (a) $67,450, (b) $74,450, (c) $73,300, (d) $66,450, (e) $73,450, (f) $70,930; R. S. Moore, Lafayette, Ind., (a) $68,200, (b) $74,132, (d) $66,219, (c) $70,504; W. M. Sutherland, St. Louis, Mo., (a) $68,283, (c) $70,616, (d) $66,199, (f) $68,694; Westchester Engineering Co., White Plains, N. Y., (a) $68,962, (b) $73,000, (c) $75,200, (d) $66,333, (e) $70,000, (f) $72,000; Volney E. Taylor, Huntington, W. Va., (a) $69,500, (b) $73,500, (d) $69,200, (e) $72,900; James Devault, Canton, Ohio, (a) $70,774, (b) $74,774, (d) $70,240; J. L. Crouse, Greensboro, N. C., (a) $71,773, (b) $73,773, (c) $76,226, (d) $70,882, (e) $72,382, (f) $73,882; Frank Cawood, Harlan, Ky., (a) $74,045, (b) $73,780, (c) $74,340, (d) $71,940, (e) $71,660, (f) $71,980; Bedford Stone & Construction Co., Indianapolis, Ind., (a) $75,684, (b) $75,000, (c) $77,000, (d) $74,224, (e) $76,300, (f) $75,300; Colonial Construction & Supply Co., Charlottesville, Va., (a) $78,899, (b) $80,899, (c) $83,394, (d) $77,271, (e) $76,679, (f) $80,424; Rigenrauch Co., Pittsburgh, Penn., (a) (b) (c) $95,139, (d) (e) (f) $92,159. Noted Nov. 12.

Cement—Leavenworth, Kan.—Bids will be received by F. H. Duehay, Supt. of Prisons, Washington, D. C., until 2 p.m., Jan. 23, for furnishing and delivering at the U. S. penitentiary, Leavenworth, 4000 bbl. of portland cement.

Addition to Post Office—Lincoln, Neb.—Bids will be received by Oscar Wenderoth, Superv. Arch., Washington, D. C., until 3 p.m., Feb. 18, for building an addition to the post office at Lincoln.

★Earthwork—Great Falls, Mont.—The following are the bids received for earthwork on Greenfields Distribution System, Greenfields, South and Mill Coulee Canals, involving about 385,000 cu.yd. of excavation: O'Connor & Helean, Great Falls, Mont., $43,691; J. E. Hilton, Billings, Mont., $52,537; MacArthur Bros. Co., 208 La Salle St., Chicago, Ill., $58,912; R. B. Fraser, Great Falls, $60,433; Grant Smith & Co., Fernwell Bldg., Spokane, Wash., $68,474; Charles Wilhite & Co., Boise, Idaho, $69,182; Tebbs & Taggart, Cowley, Wyo., $69,744; Nelson Rich, Prosser, Wash., $71,515; Bates & Rogers Construction Co., Spokane, Wash., $76,371; Foley Bros., Welch & Stewart, St. Paul, Minn., $76,174; Jurgens & Knipe, Glasgow, Mont., $44,126. Noted Nov. 26.

Post Office—Miles City, Mont.—Bids will be received by Oscar Wenderoth, Superv. Arch., Treasury Dept., Washington, D. C., until 3 p.m., Feb. 27, for the construction of a two-story and basement brick post office at Miles City.

★**Excavation, Construction**—St. Ignatius, Mont.—The following are the bids received for the construction of structures on Pablo Laterals "A" and "31A" and Sublaterals: (a) Schedule A; (b) Schedule B; (c) Schedule C; Miracle Concrete Corporation, Kalispell, Mont., (a) $8351; (b) $15,150; (c) $7883; Wilson Bros., Polson, Mont., (a) $11,951; (b) $21,043; (c) $12,076; A. L. Markhus, Polson, (a) $13,310; (b) $24,947; (c) $13,132; Municipal Construction Co., Helena, Mont., (a) $9996; (c) $21,123. Noted Nov. 26.

★**Jetty Work**—Sabine Pass, Tex.—The following are the bids received for jetty work at Sabine Pass: Charles Clark & Co., Galveston, Tex., $174,080; Edward Gillen Dock, Dredge & Construction Co., Racine, Wis., $183,000; David M. Picton & Co., Galveston, Tex., $176,600; Miller Engineering Co., Little Rock, Ark., $198,970. Noted Nov. 19.

★**Post Office and Court House**—Lawton, Okla.—Bids will be received by Oscar Wenderoth, Superv. Arch., Treasury Dept., Washington, D. C., until 3 p.m., Mar. 6, for the construction of a three-story and basement stone and brick post office and court house at Lawton.

Roof Work—Denver, Colo.—Bids will be received until 3 p.m., Jan. 11, by Oscar Wenderoth, Superv. Arch., Treasury Department, Washington, D. C., for roof work on the U. S. post office and court house.

Wood Stave Pipe—Montrose, Colo.—Bids will be received by the U. S. Reclamation Service, Montrose, until 4 p.m., Jan. 14, for the construction of 1764 lin.ft. of 17-in. wood stave pipe for the Uncompahgre Valley project. Alternative bids will be received for furnishing metal-banded or machine-banded wood stave pipe made either of Douglas fir or California redwood. F. D. Pyle is Mgr.

★**Excavation, Etc.**—Payson City, Utah—Bids will be received by the U. S. Reclamation Service Provo, Utah, until 2 p.m., Feb. 3, for construction, involving 158,000 yd. of excavation, 7000 yd. of concrete and other items. The work is located near Payson City, Utah, near the San Pedro, Los Angeles & Salt Lake R.R. and the Tintic Branch of the Denver & Rio Grande R.R. A. P. Davis is Ch. Engr.

Rock—Portland, Ore.—The only bid received at the U. S. Engineer office for furnishing 450,000 tons of rock for use on the north jetty at the mouth of the Columbia River, was from the Columbia Contract Co., at $1.10 per ton.

✚**Bridges**—Portland, Ore.—The contract for constructing eight steel swing bridges for the Dalles-Celilo Canal has been awarded to the COWLITZ BRIDGE CO., Yeon Bldg., Portland, Ore., at $15,863. Noted Nov. 5.

Repairs to Vessel—San Francisco, Calif.—Bids will be received by the Lighthouse Inspector, San Francisco, until 2 p.m., Jan. 13, for docking and repairing light vessel No. 70.

MISCELLANEOUS

Motor Fire Apparatus—Holyoke, Mass.—Press reports state that this city plans to spend $10,000 for the purchase of two combination trucks. The construction of a fire station is also contemplated.

✚**Dredging and Wharf Construction**—New Bedford, Mass.—(Official)—The State Harbor & Land Commission has awarded the contract for dredging and wharf construction to WILLIAM H. ELLIS & SON CO., 479 Meridan St., East Boston, at $347,-910. William I. Williams is Ch. Engr. Noted Dec. 3 and 17.

Dock—Stamford, Conn.—The following bids were received for the construction of the municipal dock: Surburban Engineering Co., New York, N. Y., $60,834; Young & Hyde, New York, N. Y., $75,805; Harris Construction Co., Stamford, $77,-578; W. B. Eyrich, Grantwood, N. J., $78,885; Daly & Merritt, Portchester, N. Y., $79,784. James C. Harding, 170 Broadway, New York, is Engr.

✚**Monument**—Albany, N. Y.—The contract for the erection of a memorial to the late Gen. Phillip Sheridan in Capitol Park has been awarded to DAVID C. FRENCH, at $25,000.

Stone Cutting—New York, N. Y.—(Official)—See item under "Water Supply—Irrigation."

★**Subway**—New York, N. Y.—(Official)—The Public Service Commission announces that the date for receiving bids for the construction of Section 4 of Routes Nos. 4 and 36, part of the Broadway-Fourth Ave. line, has been postponed indefinitely. Noted Dec. 17.

✚**Motor Fire Apparatus**—New York, N. Y.—(Borough of Manhattan)—(Official)—The contract for furnishing the fire department with 20 motor driven hose wagons was awarded to the INTERNATIONAL MOTOR CO., West End Ave., New York, at $73,580. Noted Dec. 10 and Dec. 24.

Riprap—New York, N. Y.—(Borough of Manhattan)—(Official)—The lowest bid received by the Commissioner of Docks and Ferries for furnishing, delivering and placing 50,-000 cu.yd. of riprap, was that of the Frederick Starr Contracting Co., 1784 Broadway, New York, at 64c. per cu.yd. Noted Dec. 31.

Fire Hydrants—New York, N. Y.—(Boroughs of Manhattan and Bronx)—(Official)—The following bids were received by the Department of Water Supply, Gas and Electricity, for furnishing double nozzle fire hydrants for use in Manhattan and Bronx. A. P. Smith & Co., $10,040; John Fox & Co., $11,-465; Kennedy Valve Mfg. Co., $11,845.

Motor Fuel Wagons—New York, N. Y.—(Borough of Manhattan)—(Official)—Bids will be received until 10:30 a.m., Jan. 15, by Robert Adamson, Fire Comr., Municipal Bldg., for furnishing and delivering four motor driven fuel wagons. The amount of security necessary will be 30% of the amount bid. For blank forms and further information apply at the office or the department, eleventh floor.

Fire Protection—New York, N. Y.—(Boroughs of Manhattan and Richmond)—The following bids were received, Dec. 30, by the Commissioner of Public Charities for installing fire protection work in the buildings on Randall's Island and those at the New York City Farm Colony: Spuyten Duyvil Construction Co., $27,170; Joseph Kresse, $27,760; Edmund D. Broderick, $28,900; Simon Russek, Inc., $29,553; J. M. Knapp, 29,667; Marble Arch Co., $30,962; McHarg-Barton Co., $30,800; Neptune B. Smythe, Inc., $31,729; Louis Waschler, $33,161; William Werner, $35,888; Andrews Bldg. Co., Inc., $49,799. Noted Dec. 17.

Fire Station—Hoboken, N. J.—The Common Council, Dec. 31, rejected all bids received for the construction of the fire station at Second and Jefferson St. Noted Nov. 26, Dec. 17.

✚**Broken Stone**—Mount Holly, N. J.—(Official)—James Logan, County Engr., writes that the following bids were received by the Board of Chosen Freeholders for furnishing broken stone for the year 1915: LAMBERTVILLE STONE QUARRY CO., Lambertville, N. J., at 70c. per ton (awarded contract); Delaware River Quarry & Construction Co., Lambertville, 85c.; Bindsboro Stone Co., Bullion Bldg., Philadelphia, 60c. Noted Dec. 31.

✚**Bathhouse**—Newark, N. J.—(Official)—The city has awarded the contract for the construction of the East Side Bathhouse to PHILIP L. MACKINSON, Newark, at $81,089. J. S. Pigott, Newark, is Arch. Noted Dec. 17.

✚**Wall**—Philadelphia, Penn.—The Department of Public Works received the following bids for removing the existing wall and constructing a new brick wall along the south, east and west sides of Independence Square: P. J. HURLEY & CO., $11,070 (awarded contract); Mitchell Bros., $11,995; Eugene Tourison, $11,530; Henry E. Baton, $12,460; M. and J. G. McHugh, $13,299; P. J. Snyder, $14,900; American Paving & Construction Co., $16,000.

Pier—Wilmington, Del.—Local press reports state that the Chamber of Commerce contemplates the construction of a pier on the river front back of Eden Park. The estimated cost is $40,000.

★**Dredging**—Baltimore, Md.—(Official)—Bids will be received until 11 a.m., Jan. 20, by the Board of Awards, City Register's office, City Hall, for dredging the main channel north from Lazaretto Light to the piers of the transatlantic liners. Approximate quantity of material to be removed is 2,000,000 cu.yd. For details see advertisement under "Contracts to Be Let."

Automobile Trucks—Front Royal, Va.—W. Jackson Turner will receive bids for new or slightly used auto-trucks and busses for operation between Front Royal and Rappahannock.

Breakwater—Newport News, Va.—The Old Dominion Land Co. plans to issue $250,000 in bonds for making improvements to the Casino property. A reinforced-concrete breakwater will be constructed, extending from the Chesapeake & Ohio Ry. depot to the shipyard. W. B. Livezey is Pres.

Dredging—Mooresville, N. C.—All bids received Dec. 26 by C. V. Turlington, Mooresville, for 225,000 cu.yd. of dredging in Withrow's Creek, have been rejected. New bids will be received about Jan. 15. L. O. White, Statesville, is Engr.

Fair Buildings—Atlanta, Ga.—Charles A. Kauffman, Design. Engr. City Construction Dept., has prepared tentative plans for the development of 380 acres in Lakewood Park for the Southeastern Fair. The plans call for the construction of an aquarium at an estimated cost of $124,000; two stone bridges; grottos; and two buildings of the Roman Colosseum type.

★**Levee and Sewer Construction**—Augusta, Ga.—(Official)—Bids will be received by the City Council, River and Canal Commission, 747 Broad St., Augusta, until noon, Jan. 19, for constructing section 4, of the earth levee at Augusta. There will be 30,000 cu.yd. of excavation and 250,000 cu.yd. of fill. Bids also will be received for the construction of 3000 lin.ft. of reinforced concrete box sewer. For details see advertisement under "Contracts to Be Let."

Harbor Improvements—Jacksonville, Fla.—The Port Commission, F. W. Bruce, Ch. Engr., plans the construction of two piers, 200x1000 ft., apron wharves, sheds, water-works, drainage system, railway and machine shops. A bond issue of $1,500,000 was recently carried to provide for this work. Noted Dec. 24.

Arena—New Orleans, La.—Plans and specifications soon will be prepared for a large arena to be erected near the business center of the city. Dominick Tortorich and Thomas M'Carey are interested.

Caterpillar Tractor and Roller—Bowling Green, Ky.—(Official)—Bids will be received in January or February by M. H. Crump, Road Engr., Warren County, for one 10-ton gasoline or oil road roller and one 40 to 60 hp. caterpillar tractor.

Elimination of Grade Crossings—Cincinnati, Ohio—Press reports state that the city plans to eliminate all the dangerous crossings. The City Engineer has been requested to confer with the officials of the railroads and commence the preparation of plans. A bond issue of $1,000,000 will be made to cover the cost.

Hardware—Springfield, Ohio—Bids will be received until Jan. 27, by George W. Netts, Secy. Bd. Trustees, Memorial Bldg. Assn., Clark County, for furnishing hardware for the memorial hall.

Stadium—Evansville, Ind.—The lowest bid received by the City School Board for the construction of a stadium at the Garvin Park athletic field, was that of the M. J. Hoffman Co., Evansville, at $49,398. Noted Oct. 29.

✚**Dredging**—Indianapolis, Ind.—The Board of Public Works has awarded the contract for removing encroachments along the east side of White River to BERNARD NORTON, at $11,-126. Noted Dec. 10 and 17.

Ditch—Richmond, Ind.—According to press reports, the Nettle Creek drainage ditch project has been approved. The plans call for the removal of about 175,000 cu.yd. of earth at an estimated cost of $20,000. Levi Peacock is County Surv.

✚**Drain**—Coldwater, Mich.—The contract for excavating the Little Swan Creek drain has been awarded to CLYDE A. WALB, Lagrange, Ind., at $12,750; the contract for building reinforced-concrete bridges was awarded to COLE & NORAN, Coldwater, at $4600. Noted Dec. 10.

Bathing Beaches and Playgrounds Bonds—Chicago, Ill.—Local press reports state that this city contemplates issuing $1,000,000 in bonds for the construction and improvement of bathing beaches, playgrounds and parks.

River Terminal—Quincy, Ill.—The Joint Terminal Commission, William K. Abbott, Chn., will soon order tentative plans to be prepared for terminals, docks, seawalls and breakwaters.

Drain—Madison, Wis.—Bids will be received until 2:30 p.m., Jan. 9, by the Town Board for furnishing the necessary materials and constructing the town drain. P. H. Hintze is Engr.

Ditches—Bemidji, Minn.—(Official)—Bids will be received until 2:30 p.m., Jan. 20, by J. L. George, County Audr., Beltrami County, for the construction of Judicial Ditch No. 23, requiring about 316,000 cu.yd. of earth excavation. The estimated cost is $59,949.

Bids will also be received on the same date for the construction of Judicial Ditches No. 26 and No. 28, requiring 115,000 and 204,618 cu.yd. of earth removal, respectively. The estimated cost of the former is $27,645, that of the latter $43,818. E. J. Bourgeois is Engr.

✚**Ditch**—Fairmont, Minn.—The contract for the construction of Ditch No. 43 has been awarded to B. W. TYLER and J. N. ELTGRATH, at $11,400.

✚**Dredging**—Minneapolis, Minn.—The Park Board has awarded the contract for dredging 175,000 cu.yd. at Cedar Lake to the HYDRAULIC DREDGING & ENGINEERING CO., at about $18,000. Two peninsulas will be eliminated and a swamp filled.

Ditch—Owatonna, Minn.—Bids will be received until 10 a.m., Jan. 11, by M. J. Parcher, County Audr., Steele County, for completing Judicial Ditch No. 1. Work consists of 42,000 cu.yd. of excavation and cleaning. George E. Ralph is Engr.

Stockyards—Billings, Mont.—Wallis Huidekoper and Charles O'Donnell, Billings, have purchased a site and have had plans prepared for the construction of stockyards and a packing plant. Bids will be received in the early spring.

Drainage—St. Ignatius, Mont.—The following bids were received on Dec. 15 for earth excavation, Pablo lateral A and sub-laterals, specifications No. 287: A. L. Marcus, Polson, $16,570; Charles Wilhite & Co., Boise, Idaho, $17,005; Wilson Bros., Polson, $19,447; Temple & Siroky, Heyburn, Idaho, $21,177; T. H. Lynch, Orland, Calif., $29,300. Charles P. Williams is Act. Superv. Engr.

✚**Drainage**—Wynne, Ark.—(Official)—A communication from W. H. Newsom, Engr., Drainage District No. 2, Crittenden County, states that the contract for 5,164,000 cu.yd. of floating dredge work has been awarded to the R. H. & G. A. McWILLIAMS DRAINAGE CONSTRUCTION CO., Memphis, Tenn., at 8.76c. per cu.yd. Noted Nov. 26, Dec. 24 and 31.

Drainage Bonds—Angleton, Tex.—The Angleton Drainage District, Dec. 20, voted an additional issue of $80,000 in drainage bonds.

Ditches—Edna, Tex.—The Drainage Commissioners, County Drainage District No. 4, will receive bids until Jan. 12 for constructing canals, drains, ditches and levees in district No. 4, comprising 20,000 acres. About 100 miles of ditches will be constructed, having an estimated yardage of 400,000 cu.yd. S. L. Chalk, Box 592, San Antonio, is the Engr.

★**Fire Hydrants**—Sweetwater, Tex.—(Official)—Bids will be received by George T. Wilson, mayor, City of Sweetwater, until 2 p.m., Jan. 20, for furnishing 50 fire hydrants, 60 iron gate valves and other miscellaneous supplies. For details see advertisement under "Contracts to Be Let."

Market—Waco, Tex.—August A. Busch & Co., St. Louis, plans to erect a market at Austin and Eighth St.

Diversion Dam—Maxwell, N. M.—According to press reports, the Maxwell Irrigated Land Co. has secured options on 15,000 acres of land across the river. It is planned to build a diversion dam across the Red River above Hebron.

✚**Refrigerating Plant**—Seattle, Wash.—The Seattle Port Commission has awarded the contract for installing three units of the refrigerating plant at the municipal docks to the VILTER MFG. CO., Milwaukee, Wis., at $50,000.

Drainage—Walla Walla, Wash.—Bids for the construction of the drainage system in the Attalia Drainage District were received from C. A. Broad, Spokane, and H. L. Wilson, Walla Walla. The bids were approximately $48,000 each.

Dredge Equipment—Portland, Ore.—The Seattle Port Commission will receive bids soon for the installation of new machinery in the dredge "Columbia."

Dike—Tillamook, Ore.—Bids will be received until Jan. 10 by H. F. Goodspeed, Tillamook, for constructing 13,400 lin.ft. of dike along the shores of Tillamook Bay.

✚**Dredging**—Longbeach, Calif.—The contract for dredging about 64,000 cu.yd. of silt from Longbeach Harbor has been awarded to the LOS ANGELES DREDGING CO., Los Angeles, at $24,000. Noted Oct. 22, Dec. 24 and 31.

River Improvements—Los Angeles, Calif.—The Neuvo Land Co. plans to spend about $27,000 in improving San Jacinto River which runs through the Lakeview, Perris and Hemet Valley District.

Oil Tanks—Richmond, Calif.—The Royal Shell Co. of California has awarded the contract for the construction of ten oil storage tanks in Contra Costa County to the PETROLEUM IRON WORKS CO. at $136,500.

✚**Metal Roofing**—San Francisco, Calif.—The Board of Public Works has awarded the contract for metal roofing the City Hall dome and lantern to the FORDERER CORNICE WORKS at $36,687.

Dock—San Francisco, Calif.—The Harbor Board will soon award the contract for the construction of a dock at the foot of Harrison St. for the Pacific Alaska Navigation Co.

Levee Work—Washington, Calif.—The township plans to spend $14,500 in enlarging and repairing the existing levee. The state engineering department will contribute $5000, the remainder will be raised by issuing bonds.

Motor Fire Apparatus—Halifax, N. S.—The Board of Control has recommended that $11,500 be included in this year's estimates for the purchase of a motor chemical engine. P. J. Broderick is Ch., Fire Dept.

Channel—Winnipeg, Man.—Bids will be received by S. H. Reynolds, Comn. Greater Winnipeg Water District, 901 Boyd Bldg., for furnishing the labor and material necessary for the construction of a channel between Indian and Snowshoe Bays.

Ferry and Wharf Extensions—West Vancouver, B. C.—This city plans to spend $6000 in making ferry extensions and $25,000 for repairs and extensions to the 14th St. wharf.

BUILDINGS

Other items relative to Building Construction will be found under the following headings: "Industrial Works," "Federal Government Work" and "Miscellaneous."

Manchester, N. H.—Bids will be received until Mar. 1 for the construction of a church to cost $40,000. J. N. Quertin, 316 Kelley St., is Arch.

Belmont (Boston post office), **Mass.**—Plans are being prepared by Albert M. Pride, Arch., for the construction of a ten-story building at School and Belmont St. for the Highland Associates. Estimated cost $100,000.

Boston, Mass.—The Donnelly Advertising Agency has purchased a 190x200-ft. site on Washington St. for the construction of a concrete building. Estimated cost, $50,000.

✚**Boston, Mass.**—The contract for the construction of a one-story 96x107-ft. Christian Science Church at Elm Hill Ave. and Howland St., Roxbury District, has been awarded to NORCROSS BROS. CO., Tremont Bldg.

✚The contract for the construction of a ten-story, 23x192-ft. hotel at Washington and Avery St. for the Commonwealth Associates has been awarded to the HAYNES CONSTRUCTION CO., 178 Devonshire St.

Wakefield, Mass.—Preliminary arrangements are being made by Samuel Glazer and Harry Brooker, Boston, for the construction of a building on Wakefield Square for William Cohen. Estimated cost, $40,000.

Worcester, Mass.—All bids received for the construction of the $100,000 gymnasium for the Worcester Polytechnic Institute have been rejected. New bids will be received soon. Hewitt & Brown, South Minneapolis, is Arch.

Providence, R. I.—Clark & Howe, Archs., 76 Weybosset St., have completed plans for the construction of a school on Laurel Ave. Estimated cost, $190,000.

★**Bridgeport, Conn.**—(Official)—Bids will be received by the Board of Contract and Supply, Room 28, City Hall, until noon, Feb. 1, for the complete construction of an almshouse. See advertisement under "Contracts to Be Let."

Waterbury, Conn.—Bids will be received until Jan. 16, for the construction of a two-story and basement 87x120-ft. school by Louis A. Walsh, Arch., 51 Leavenworth St. Estimated cost, $85,000.

★**Binghamton, N. Y.**—(Official)—Bids will be received until 2:30 p.m., Jan. 21, by the State Hospital Commission, Capitol, Albany, for the construction of a building for chronic patients at the Binghamton State Hospital. Lewis M. Farrington is Asst. Secy. of the Comn. See Advertisement under "Contracts to Be Let" in the Dec. 31 issue.

Brighton (Rochester post office), **N. Y.**—Plans have been prepared by Howard W. Cutler for the construction of a building for the Iola Sanatorium. Estimated cost, $136,000.

Croghan, N. Y.—Plans are being prepared by D. D. Kreff, Arch., Watertown, N. Y., for the construction of parochial school for the St. Stephens R. C. Church. Estimated cost $50,000.

Manhasset, N. Y.—Bids will be received until Jan 8, by the Board of Education, for the construction of a two-story school. Estimated cost, $70,000. F. H. Briggs, Plandome, L. I., is Arch.

New York, N. Y.—(Borough of Bronx)—Matthew W. Del Gaudio, 1910 Webster Ave., is preparing plans for the construction of two five-story apartments at Arthur Ave. and 184th St., for the Vico Realty Co., 47 Jay St. Estimated cost, $100,000.

✚**New York, N. Y.**—(Borough of Bronx)—The contract for the construction of a school for the Church of Our Lady of Mercy, 2506 Marion Ave., has been awarded to McDERMOTT & HANIGAN, Inc., 103 Park Ave. J. V. Van Pelt is Arch.

(Borough of Bronx)—B. H. and C. N. Whinston, Archs., 148th St. and Third Ave., are preparing plans for the construction of a five-story building for the Young Folk's Circle of Forest Ave. Synagogue. Estimated cost, $50,000.

New York, N. Y.—(Borough of Manhattan)—(Official)—Sidney Diamant, Consult. Engr., 15 East 40th St., has been retained as structural engineer in connection with the eight-story fireproof building to be constructed at 588 Fifth Ave. for Frank Bros. Alfred Freeman, 29 West 34th St. is Arch.

★**New York, N. Y.**—(Borough of Manhattan)—(Official)—All bids received, Dec. 4, by the Board of Trustees of the Bellevue Hospital, for alteration to the main building of Harlem Hospital have been rejected. New bids will be received until 3 p.m., Jan. 13. Noted Dec. 17.

(Borough of Manhattan)—Plans have been prepared for the construction of a 13-story apartment house at 88th St. and West End Ave. Estimated cost, $1,200,000. C. V. Paterno, M. D., is interested.

(Borough of Manhattan)—Gronenberg & Leuchtag, Archs., 303 Fifth Ave., have completed plans for the construction of a six-story, 50x90-ft. apartment, at 113th St. and Seventh Ave., for the William Building Corporation, 132 Nassau St. Estimated cost, $60,000.

(Borough of Manhattan)—Bids will be received by Sommerfeld & Steckler, Archs., 31 Union Sq., for the construction of a 54x111 ft. synagogue at 22-28 West 114th St., for the Congregation Kel Israel Amshe Poland, 20-22 Forsyth St. Estimated cost $75,000.

★**Yorktown Heights, N. Y.**—(Official)—Bids will be received until noon, Jan. 12, by William B. Osgood Field, Pres. Bd. of Mgrs. of the New York State Training School for Boys, 2 West 45th St., New York, N. Y., for the construction of seven cottages for the training school. See advertisement under "Contracts to Be Let" in Dec. 31 issue.

Belleville, N. J.—All bids opened Dec. 29 by the Board of Education were rejected as they exceeded the appropriation. The lowest bid was submitted by the Altoria Construction Co., 3 East 44th St., New York, N. Y., at $108,667. The amount available is about $104,000. Noted Dec. 17.

Camden, N. J.—See item under "Industrial Works."

✚Jersey City, N. J.—The contract for the rebuilding of St. Johns Episcopal Church on Summit Ave., recently destroyed by fire, has been awarded to WILLIAM ROBERTSON. Noted Nov. 5.

Morristown, N. J.—Valentine & Kissam, Archs., New York, N. Y., are preparing plans for the construction of an addition to the Memorial Hospital. Estimated cost, $75,000.

Newark, N. J.—The Board of Freeholders has had plans prepared for an addition to the Overbrook Hospital. Estimated cost, $200,000.

✚Newark, N. J.—(Official)—Contracts for the interior work for the new wing and alterations at the city hospital have been awarded as follows: Masonry work, WILLIAM G. SARWELL, at $46,300; electrical work, BEAVER ENGINEERING CO., at $35,000; metal work, W. F. SHAFFER, INC.

Bids will be received until 4.15 p.m., Jan. 12, by the Board of Education for the construction of the McKinley School. Estimated cost, $102,000. R. D. Argue is Secy. of Bd. Noted Dec. 31.

Bedford, Penn.—David Goldner, Arch., 815 Highland Bldg., Pittsburgh, is preparing plans for Lee F. Hoffman, for the construction of an 82x120-ft., four-story building. Estimated cost $150,000.

Coaldale, Penn.—Plans are being prepared by Clye S. Adams, Arch., Philadelphia, for the construction of a two-story high school. Estimated cost, $50,000.

Philadelphia, Penn.—Plans are being prepared by John T. Windrim, Arch., for the construction of a group of seven buildings at 39th and Filbert St. for the Presbyterian Hospital. Estimated cost, $1,000,000.

Philadelphia, Penn.—Bids will soon be received for the construction of a school at James and Pratt St., Tacony. Estimated cost, $165,000. J. Horace Cook is Supt. of School Bldgs.

Bids will soon be received for the construction of an addition to the Southwark School. Estimated cost, $100,000. J. Horace Cook is Supt. of School Bldgs.

Plans are being prepared by B. T. Medoff & Son, Archs., for the construction of a theater at 31st and Wilt St., for Joseph Fisher, 720 Sansom St. Estimated cost, $50,000.

Bids will be received by R. H. Harte, M. D., Dir. Dept. of Pub. Health and Charities, Room 584 City Hall, until noon, Jan. 12, for the construction of new buildings to the Philadelphia Hospital for Contagious Diseases. Philip H. Johnson, 1824 Land Title Bldg., is Arch.

Pittsburgh, Penn.—Preliminary plans have been prepared by Alden & Harlow, Archs., Farmers' Bank Bldg. for the construction of the South Hills High School on Ruth and Secane St., Mt. Washington. Estimated cost $265,000.

Pittsburgh, Penn.—Huehl, Schmid & Holmes, Archs., Chicago, Ill., are preparing plans for the construction of a temple on Grant Blvd. and Lytton Ave., for the Syria Improvement Association. Estimated cost, $300,000.

Scranton, Penn.—Preliminary arrangements are being made for the construction of a building for St. Paul's Catholic Church. Estimated cost, $100,000.

Wilkes-Barre, Penn.—Plans have been prepared by Owen McGlynn, Arch., for the construction of a two-story school, to cost $60,000.

York, Penn.—Plans are being prepared by B. F. Willis, Arch., West Market St., for the construction of an administration building, nurses' home, power house and other structures for the York County Poor Board. Estimated cost, $350,000.

Washington, D. C.—Plans are being prepared by Tracy & Swartout, Archs., 244 Fifth Ave., New York, N. Y., for the construction of a $2,000,000 George Washington Memorial for the George Washington Memorial Association.

✚Richmond, Va.—The contract for the construction of a school on Bainbridge St. has been awarded to A. M. WALKUP & CO., American Bank Bldg., at $99,820. Noted Dec. 10.

Richmond, Va.—Plans are being prepared by Carneal & Johnston for the construction of a ten-story, 25x150-ft. apartment house at Fifth and Grace St. Estimated cost, $150,000. Morton G. Talhimer, First National Bank Bldg., is interested.

Asheville, N. C.—(Official)—The lowest bid received for the construction of an addition to the Mission Hospital was that of Longest & Tessier Co., Greensboro, N. C. W. H. Lord is Arch. Noted Dec. 24.

✚Columbia, Tenn.—The contract for the construction of a 191x200-ft. high school has been awarded to W. T. WILLERFORD, Nashville, at $58,300. Hart & Gardner, Nashville, are Archs.

✚Cincinnati, Ohio—Contracts for the construction of the Chemistry Building for the University of Cincinnati have been awarded, by the Board of Directors, as follows: JOHN LACKER & SON, excavation, masonry and concrete footings, $11,103; ROOS BROS., reinforced concrete, $29,155; M. MARCUS BUILDING CO., carpentry, $12,750; POTTHOFF CONSTRUCTION CO., structural and ornamental iron and steel, $7227; HARKNESS & TOWLER, sheet metal work and roofing, $1079; DAVID HUMMEL BUILDING CO., brick and terra cotta work, tile partitions and granite work, $34,830; J. J. VOGELPOHL CO., heating, $8847; WILLIAMSON HEATER CO., ventilating, $12,089; HENKEL & SULLIVAN, grading and road work, $7439. Noted Oct. 8 and Nov. 26.

Cleveland Heights (Warrensville post office), **Ohio**—Plans have been prepared by Frederick W. Striebinger, Arch., 1900 Euclid Ave., Cleveland for the construction of a group of buildings on Lee and Mayfield Ave. for the Masons of Cleveland Heights and Euclid. Estimated cost, $125,000.

Hamilton, Ohio—The city has sold bonds for $200,000 the proceeds of which will be used for constructing a city hall. Noted Dec. 31.

McCutchenville, Ohio—The Board of Education will construct a high school for which $40,000 in bonds have been authorized.

Toledo, Ohio—The city has petitioned the City Council to issue $650,000 in bonds to be used for the construction of a city hall in Toledo.

Youngstown, Ohio—(Official)—Frank H. Hale, Engr., advises that plans have not been prepared for the $40,000 building in connection with the new $400,000 telephone plant. Noted Dec. 24.

Huntington, Ind.—Plans are being prepared for the construction of a 150x200-ft. school. Estimated cost, $150,000. Z. T. Dungan is Secy. of Bd. of Education.

Newcastle, Ind.—The citizens of Newcastle have petitioned the County Commissioners to appropriate $40,000 for the construction of a county hospital.

Battle Creek, Mich.—The Y. W. C. A. Building Committee plans the construction of a building at Maple, Van Buren St. and North Ave. Estimated cost, $50,000. I. L. Stone is Chn. of Bldg. Com.

Saginaw, Mich.—Bids will be received about June 1 for the construction of a three-story, 60x200-ft. school. Estimated cost, $60,000. Allen & Curtis are Archs.

Chicago, Ill.—G. P. Racine of G. P. Racine & Co. has purchased a 100x160-ft. site on Racine Ave. near Wilson Ave. for the construction of an eight-story fireproof hotel. Estimated cost $175,000. Construction will be started in March.

Milwaukee, Wis.—Plans have been prepared and submitted to the Building Inspection Department for the construction of a $50,000 apartment house on Twelfth St. between Grand Ave. and Wells St.

Cedar Falls, Iowa—Proudfoot, Bird & Rawson, Archs., Hubbell Bldg., Des Moines, are preparing plans for the construction of a three-story and basement vocational building for the Iowa State Teachers' College. The estimated cost is $100,000.

Pella, Iowa—Bids will be received about Feb. 15 for the construction of a two-story and basement high school. Estimated cost, $48,000. James S. Cox, Estherville, is Arch.

Wichita, Kan.—Philanthropists of Wichita and officers of the Lake Mohawk Conference plan the construction of a school for Indians on a 20-acre site recently purchased.

Omaha, Neb.—The Creighton University plans the construction of an $80,000 gymnasium on the university campus.

Sioux Falls, S. D.—The Elks of Sioux Falls plan the construction of a three-story, 60x68-ft. club building on Dakota Ave. between Ninth and Tenth St. The estimated cost is $75,000.

Alton, Mo.—An addition estimated to cost $50,000 will be constructed to the Cathedral Orphanage, at Alton.

St. Louis, Mo.—The bill providing $75,000 for the construction of a stone building for the House of Detention and Juvenile Court has been passed by the House of Delegates. Noted Dec. 10.

Austin, Tex.—The First Methodist Church will construct a $100,000 building in Austin.

✚Galveston, Tex.—The contract for the construction of the municipal building has been awarded, by the City Commission to the GROSS CONSTRUCTION CO., Waco, at $205,693. Noted Sept. 18, 1913 and Sept. 3, 1914.

Houston, Tex.—The Seth Ward Memorial Methodist Church plans the construction of a building to cost about $50,000.

✚Logan, Utah—(Official)—The contract for the construction of a four-story 75x100-ft. hotel and bank building for the Hotel Logan Co., has been awarded to the HYDE & THOMPSON BUILDING CO. The heating and plumbing contract has been awarded to F. W. SPENCER & CO., Salt Lake City.

✚(Official)—The contract for the construction of the three-story, 68x115-ft., chemical laboratory for the Utah Agricultural College has been awarded to HYDE & THOMPSON BUILDING CO., Logan, Utah. Noted Dec. 3.

Walla Walla, Wash.—The County Commissioners voted to expend about $150,000 on a courthouse at Walla Walla. Henry Osterman, Arch., is preparing plans. Noted Aug. 7, Oct. 23 and Nov. 6, 1913.

Monmouth, Ore.—The Board of Regents of the Oregon Normal School have petitioned the next legislature to appropriate $50,000 for the construction of a training school at Monmouth.

Portland, Ore.—Plans have been prepared for the construction of a four-story building for the women of Reed College. The estimated cost is $120,000. William T. Foster is Pres.

✚Longbeach, Calif.—The BAKER IRON WORKS, Los Angeles has been awarded the contract for the structural steel work for the Class A building for Markwell Bros. The building was designed and is being constructed by the Longbeach Improvement Co. Estimated cost, $300,000. Noted Oct. 1.

Los Angeles, Calif.—The students of the University of Southern California plan the construction of a $60,000 building as a memorial to James H. Hoose. George F. Bovard is Pres.

(Continued on page 14)

✚Sewage Collecting System—Dunellen, N. J.—Bids were received, Dec. 7, by the Borough Council for constructing a sewage collecting system from (A) Engineer's Estimate; (B) H. K. CORBIN & CO., INC., 170 Broadway, New York, N. Y. (awarded contract); (C) Bruno Pizzimenti, Seneca Falls, N. Y.; (D) Di Napoli & Toriello Construction Co., Hackensack, N. J.; (E) Cantrell Construction Co., Philadelphia, Penn.; (F) John C. Scrade, Inc., Brooklyn, N. Y.; (G) Fusco Construction Co., Newark, N. J.; (H) Kelly-McFeeley Co., Camden, N. J.; (I) Peter D'Amato, Newark, N. J.; (J) Joseph Sigretto, Woodhaven, N. Y.; (K) Peekskill Construction Co., Peekskill, N. Y.; (L) Harrison & Burton, New York, N. Y.; (M) Frank Puglia, Paterson, N. J.; (N) Jones & McRoberts, Ltd., Pittsburgh, Penn.; (O) D. M. Rosser, Kingston, Penn.; (P) Joseph Johnson's Sons, West New Brighton, N. Y.; (Q) A. H. Lupton & Son, Bridgeton, N. J.; (R) T. Foster Callahan, Elizabeth, N. J.; (S) H. C. Brooks Co., Martinsburg, W. Va.; (T) Joseph Dimando, Inc., Mamaroneck, N. Y.; (U) Langan Engineering & Construction Co., Jersey City, N. J.; (V) Cenedella & Co., Milford, Mass.; (W) Schneider Stelle & Co., New Brunswick, N. J.; (X) A. D. Ambrosio, Hartford, Conn. The item bids were as follows:

	A	B	C	D	E	F	G	H	I	J	K	L
10,400 lin.ft. 8-in. vitrified pipe sewer, 0-6 ft. deep	$0.47	$0.33	$0.43	$0.48	$0.41	$0.44	$0.47	$0.425	$0.47	$0.325	$0.47	$0.47
39,600 lin.ft. 8-in. vitrified pipe sewer, 6-8 ft. deep	0.59	0.45	0.47	0.55	0.50	0.49	0.52	0.568	0.53	0.66	0.57	0.59
6600 lin.ft. 8-in. vitrified pipe sewer, 8-10 ft. deep	0.73	0.70	0.70	0.77	0.73	0.63	0.67	0.76	0.60	0.80	0.79	0.72
1400 lin.ft. 8-in. vitrified pipe, sewer, 10-12 ft. deep	0.92	0.96	1.00	1.07	0.92	0.94	0.77	0.99	0.89	1.05	1.10	0.89
800 lin.ft. 8-in. vitrified pipe sewer, 12-14 ft. deep	1.17	1.18	1.25	1.46	1.33	1.06	0.92	1.53	1.13	1.40	1.40	1.42
100 lin.ft. 8-in. vitrified pipe sewer, 14-16 ft. deep	1.47	1.46	2.00	1.84	1.67	1.65	1.25	1.83	1.83	2.00	1.74	2.22
1000 lin.ft. 10-in. vitrified pipe sewer, 0-6 ft. deep	0.59	0.40	0.50	0.57	0.57	0.52	0.60	0.505	0.54	0.60	0.62	0.54
2700 lin.ft. 10-in. vitrified pipe sewer, 6-8 ft. deep	0.71	0.60	0.60	0.65	0.65	0.60	0.67	0.6375	0.60	0.80	0.70	0.63
1900 lin.ft. 10-in. vitrified pipe sewer, 8-10 ft. deep	0.86	0.90	0.80	0.92	0.80	0.73	0.80	0.83	0.83	0.95	0.94	0.79
1300 lin.ft. 10-in. vitrified pipe sewer, 10-12 ft. deep	1.06	1.19	1.05	1.36	1.01	1.02	0.87	1.06	1.27	1.15	1.27	0.96
3900 lin.ft. 10-in. vitrified pipe sewer, 12-14 ft. deep	1.32	1.35	1.30	1.70	1.40	1.15	1.00	1.57	2.22	1.50	1.51	1.74
800 lin.ft. 10-in. vitrified pipe sewer, 14-16 ft. deep	1.64	2.04	2.00	2.00	1.70	1.75	1.37	1.87	2.76	1.75	1.82	2.29
100 lin.ft. 12-in. vitrified pipe sewer, 0-6 ft. deep	0.71	0.58	0.60	0.66	0.62	0.62	1.00	0.61	0.60	0.75	0.73	0.59
100 lin.ft. 12-in. vitrified pipe sewer, 6-8 ft. deep	0.84	0.77	0.75	0.75	0.72	0.71	1.15	0.77	0.75	1.00	0.80	0.68
100 lin.ft. 12-in. vitrified pipe sewer, 8-10 ft. deep	1.01	1.03	1.00	1.05	0.88	0.87	1.30	0.98	1.00	1.25	1.11	0.84
100 lin.ft. 12-in. vitrified pipe sewer, 10-12 ft. deep	1.22	1.28	1.50	1.43	1.22	1.09	1.50	1.24	1.50	1.50	1.47	1.01
200 lin.ft. 12-in. vitrified pipe sewer, 12-14 ft. deep	1.50	1.57	2.00	1.87	1.58	1.22	2.00	1.81	2.55	1.65	1.69	1.79
100 lin.ft. 15-in. vitrified pipe sewer, 0-6 ft. deep	0.94	0.77	0.80	0.92	0.91	0.80	1.10	0.83	0.95	1.00	1.03	0.89
100 lin.ft. 15-in. vitrified pipe sewer, 6-8 ft. deep	1.07	0.96	1.00	1.02	1.04	0.93	1.25	0.98	1.16	1.15	1.17	1.00
100 lin.ft. 15-in. vitrified pipe sewer, 8-10 ft. deep	1.25	1.22	1.30	1.33	1.35	1.13	1.50	1.20	1.33	1.50	1.46	1.15
100 lin.ft. 15-in. vitrified pipe sewer, 10-12 ft. deep	1.49	1.43	1.60	1.76	1.57	1.43	1.75	1.46	2.60	1.75	1.80	1.27
200 lin.ft. 15-in. vitrified pipe sewer, 12-14 ft. deep	1.79	1.77	2.00	2.21	2.03	1.58	2.00	2.00	2.95	1.90	2.03	1.40
1500 lin.ft. 15-in. vitrified pipe sewer, 14-16 ft. deep	2.15	1.87	2.30	2.58	2.21	2.17	2.50	2.35	3.37	2.02	2.36	2.55
300 lin.ft. 15-in. vitrified pipe sewer, 16-18 ft. deep	2.59	2.32	2.80	2.75	3.12	2.83	3.00	2.76	3.52	2.75	2.82	3.05
2300 5-in. Y branches on 8-in. pipe	0.60	0.32	0.30	0.48	0.55	0.30	1.00	0.35	0.50	0.40	0.56	0.50
500 5-in. Y branches on 10-in. pipe	0.71	0.42	0.40	0.70	0.81	0.45	1.00	0.51	0.60	0.58	0.78	0.70
8 5-in. Y branches on 12-in. pipe	0.82	0.50	0.50	0.90	0.95	0.50	1.00	0.80	0.75	0.72	0.95	0.90
80 5-in. Y branches on 15-in. pipe	0.98	0.64	0.75	1.53	1.45	1.00	1.50	1.02	1.00	1.30	1.12	1.40
700 5-in. one-eighth bends	0.36	0.10	0.20	0.29	0.39	0.30	0.50	0.35	0.45	0.40	0.45	0.25
200 5-in. Y branches with caps	0.61	0.25	0.50	0.48	1.18	0.50	1.00	0.64	0.40	0.40	0.73	0.35
500 lin.ft. 5-in. vitrified pipe risers	0.76	0.72	0.70	0.43	0.56	1.05	1.00	0.81	0.40	0.75	0.34	1.00
9000 lin.ft. 5-in. vitrified house connections	0.46	0.55	0.40	0.39	0.41	0.50	0.37	0.49	0.35	0.40	0.50	0.50
1600 lin.ft. laying 6-in. c.i. force main	0.32	0.30	0.35	0.42	0.38	0.60	0.50	0.30	0.35	0.75	0.67	0.25
3000 lin.ft. ¼" galvanized iron pipe line	0.25	0.20	0.30	0.12	0.24	0.50	0.27	0.22	0.25	0.30	0.45	0.30
25 tons c.i. bell and spigot pipe	23.00	22.00	23.00	22.00	24.00	24.00	25.00	20.70	50.00	40.00	40.00	21.00
2 tons c.i. specials	55.00	60.00	56.00	60.00	73.50	70.00	50.00	55.00	60.00	60.00	90.00	60.00
160 manholes	40.00	40.00	40.00	42.00	46.00	40.00	52.00	47.43	38.00	40.00	45.00	40.00
70 flushtanks	70.00	75.00	75.00	80.00	81.60	90.00	100.00	79.43	70.00	71.00	84.00	75.00
Sewage pumping station Bound Br. R'd n'r Schwartz Pl. (lump sum)	1850.00	1900.00	2000.00	900.00	1812.00	3200.00	2700.00	2356.00	2500.00	1885.00	2600.00	2900.00
Sewage pumping station Bound Br. R'd n'r Washington Av. & 6th St.	3085.00	1500.00	2500.00	1400.00	2656.00	4000.00	3750.00	3154.00	3500.00	2675.00	2400.00	3600.00
Sewage pumping machinery in P.S. B'd Br. Rd near Schwartz Pl.	4045.00	2600.00	2600.00	1600.00	3482.00	3200.00	2000.00	2900.00	2500.00	2500.00	3400.00	4315.00
Sewage pumping machinery Washington Ave. & 6th St.	2960.00	3700.00	3800.00	3700.00	3968.00	3300.00	4700.00	3633.00	3500.00	4490.00	3900.00	4114.00
1000 ft. b.m. lumber for foundations	45.00	35.00	75.00	45.00	56.50	40.00	47.00	50.00	40.00	40.00	45.00	30.00
100 lin.ft. piles	0.50	1.00	0.75	0.60	1.50	0.75	0.30	1.00	0.50	0.50	0.90	1.00
1000 ft. b.m. sheathing left in place	35.00	35.00	40.00	38.00	35.00	25.00	47.00	50.00	36.00	40.00	28.00	30.00
700 cu.yd. excavation and embankment	1.00	1.00	1.50	0.50	2.35	1.00	0.50	1.00	1.25	0.60	0.95	0.60
200 cu.yd. extra earth excavation	0.60	1.00	1.50	0.75	1.00	1.00	0.47	0.50	1.50	0.60	0.56	0.60
200 cu.yd. rock excavation	3.00	2.00	2.00	2.00	2.50	2.00	1.00	3.50	2.00	3.00	2.80	2.00
200 cu.yd. earth filling	1.00	0.60	0.60	0.25	0.45	0.30	0.50	0.50	0.35	0.30	0.62	0.50
100 cu.yd. stone or gravel filling	2.00	1.50	2.00	2.25	2.30	2.00	2.00	1.25	3.00	2.50	1.15	2.00
100 cu.yd. additional concrete	9.00	6.50	8.00	7.00	5.50	10.00	12.00	6.60	10.00	5.50	7.25	10.00
1000 lb. additional steel reinforcement	0.04	0.03	0.04	0.04	0.03	0.03	0.05	0.03	0.03	0.025	0.05	0.05
13,000 sq.yd. resurfacing macadam	0.30	0.40	0.25	0.18	0.27	0.39	0.27	0.30	0.30	0.25	0.34	0.50
Extended totals	$91,624	$82,604	$84,115	$86,806	$89,577	$90,361	$92,343	$93,254	$94,565	$94,691	$97,709	$99,675

	M	N	O	P	Q	R	S	T	U	V	W	X
10,400 lin.ft. 8-in. vitrified pipe sewer, 0-6 ft. deep	$0.49	$0.64	$0.55	$0.52	$0.65	$0.60	$0.70	$0.75	$0.70	$0.80	$0.90	$0.85
39,600 lin.ft. 8-in. vitrified pipe sewer, 6-8 ft. deep	0.50	0.75	0.65	0.63	0.69	0.75	0.80	0.95	0.80	1.00	1.06	1.15
6600 lin.ft. 8-in. vitrified pipe sewer, 8-10 ft. deep	0.75	1.00	0.65	1.23	0.82	0.90	0.90	1.20	1.43	1.23	1.50	1.50
1400 lin.ft. 8-in. vitrified pipe, sewer, 10-12 ft. deep	1.40	1.10	1.20	1.45	1.17	1.25	1.25	1.40	1.79	1.63	1.98	1.85
800 lin.ft. 8-in. vitrified pipe sewer, 12-14 ft. deep	1.65	1.30	1.50	1.85	1.62	1.85	2.00	1.75	1.97	2.11	2.55	2.25
100 lin.ft. 8-in. vitrified pipe sewer, 14-16 ft. deep	2.25	1.50	1.60	2.40	1.82	2.50	3.00	2.05	2.46	2.67	3.75	3.00
1000 lin.ft. 10-in. vitrified pipe sewer, 0-6 ft. deep	0.47	0.80	0.65	0.60	0.73	0.72	0.80	0.80	0.75	0.88	0.98	0.91
2700 lin.ft. 10-in. vitrified pipe sewer, 6-8 ft. deep	0.60	0.90	0.85	0.82	0.77	0.95	0.95	1.10	0.76	1.08	1.25	2.25
1900 lin.ft. 10-in. vitrified pipe sewer, 8-10 ft. deep	1.00	1.10	1.10	1.13	1.00	1.10	1.10	1.40	1.52	1.31	1.60	2.55
1300 lin.ft. 10-in. vitrified pipe sewer, 10-12 ft. deep	1.40	1.20	1.60	1.35	1.25	1.60	1.50	1.75	1.93	1.71	2.00	3.00
3900 lin.ft. 10-in. vitrified pipe sewer, 12-14 ft. deep	2.25	1.40	1.65	1.85	2.10	2.25	2.50	2.00	2.04	2.19	2.60	3.50
800 lin.ft. 10-in. vitrified pipe sewer, 14-16 ft. deep	2.75	1.50	1.90	2.50	2.70	3.25	3.75	2.75	2.61	2.75	3.84	5.25
100 lin.ft. 12-in. vitrified pipe sewer, 0-6 ft. deep	0.65	0.90	0.75	0.80	1.10	0.85	0.95	0.85	0.74	1.10	1.20	1.10
100 lin.ft. 12-in. vitrified pipe sewer, 6-8 ft. deep	0.75	1.00	0.85	1.30	1.44	1.00	1.15	1.17	0.82	1.35	1.45	1.25
100 lin.ft. 12-in. vitrified pipe sewer, 8-10 ft. deep	1.10	1.10	1.35	1.35	1.73	1.40	1.30	1.45	1.57	1.75	1.86	2.00
100 lin.ft. 12-in. vitrified pipe sewer, 10-12 ft. deep	1.50	1.30	1.55	1.70	1.78	2.00	1.80	1.75	2.00	2.25	2.27	2.50
200 lin.ft. 12-in. vitrified pipe sewer, 12-14 ft. deep	2.50	1.40	1.90	2.00	2.14	2.80	2.90	2.00	2.10	2.75	2.84	3.10
100 lin.ft. 15-in. vitrified pipe sewer, 0-6 ft. deep	0.80	1.15	1.00	1.05	1.20	1.00	1.25	1.20	0.94	1.50	1.40	1.45
100 lin.ft. 15-in. vitrified pipe sewer, 6-8 ft. deep	0.90	1.30	1.10	1.20	2.45	1.25	1.50	1.40	1.01	1.67	1.65	1.75
100 lin.ft. 15-in. vitrified pipe sewer, 8-10 ft. deep	1.60	1.40	1.60	1.45	2.88	1.75	2.00	1.75	1.76	2.07	2.06	2.15
100 lin.ft. 15-in. vitrified pipe sewer, 10-12 ft. deep	2.25	1.60	1.75	1.95	3.00	2.25	2.50	2.00	2.20	2.65	2.47	3.10
200 lin.ft. 15-in. vitrified pipe sewer, 12-14 ft. deep	2.75	1.70	1.90	2.50	3.28	3.00	3.00	2.40	2.38	3.32	3.04	4.50
1500 lin.ft. 15-in. vitrified pipe sewer, 14-16 ft. deep	3.25	1.90	2.20	2.90	3.73	3.50	4.00	3.00	2.85	4.22	4.14	5.85
300 lin.ft. 15-in. vitrified pipe sewer, 16-18 ft. deep	4.00	2.00	2.90	3.50	3.95	4.25	5.00	4.00	3.09	5.32	5.35	6.35
2300 5-in. Y branches on 8-in. pipe	0.65	0.60	0.45	0.50	0.60	0.50	0.60	0.55	0.60	0.50	0.48	1.10
500 5-in. Y branches on 10-in. pipe	0.75	0.70	0.50	0.65	0.80	0.75	0.90	0.70	0.82	0.65	0.65	1.15
8 5-in. Y branches on 12-in. pipe	2.00	0.80	0.65	0.85	1.10	1.25	1.25	0.90	1.00	0.85	0.83	1.75
80 5-in. Y branches on 15-in. pipe	2.20	1.50	0.95	1.50	1.50	1.25	1.50	1.50	1.72	1.50	1.26	2.25
700 5-in. one-eighth bends	0.60	0.30	0.45	0.30	0.50	0.40	0.40	0.30	0.36	0.40	0.20	0.45
200 5-in. Y branches with caps	0.80	0.60	0.65	0.40	0.60	0.50	1.00	0.40	0.46	0.60	0.47	0.35
500 lin.ft. 5-in. vitrified pipe risers	1.00	0.50	0.70	0.25	0.60	0.50	1.00	0.40	0.25	0.60	0.60	0.45
9000 lin.ft. 5-in. vitrified house connections	0.30	0.40	0.45	0.80	0.69	0.50	0.80	0.55	0.94	0.50	0.65	0.65
1600 lin.ft. laying 6-in. c.i. force main	0.35	0.30	0.40	1.00	0.35	0.40	0.50	0.50	1.25	0.40	0.28	0.85
3000 lin.ft. ¼" galvanized iron pipe line	0.45	0.30	0.15	0.25	0.10	0.10	0.50	0.40	0.76	0.40	0.15	0.45
25 tons c.i. bell and spigot pipe	40.00	30.00	25.00	24.50	24.00	24.00	25.00	22.50	69.00	25.00	22.00	30.00
2 tons c.i. specials	80.00	60.00	60.00	65.00	60.00	60.00	80.00	80.00	60.00	65.00	55.00	32.00
160 manholes	40.00	40.00	50.00	45.00	52.50	45.00	50.00	60.00	75.00	48.00	38.00	59.00
70 flushtanks	75.00	70.00	100.00	90.00	80.00	70.00	75.00	90.00	85.00	85.00	72.00	87.00
Sewage pumping station Bound Br. R'd n'r Schwartz Pl. (lump sum)	2500.00	2000.00	3000.00	3000.00	2500.00	3500.00	4000.00	3500.00	2105.00	2284.00	2640.00	3279.00
Sewage pumping station bound Br. R'd n'r Washington Av. & 6th St.	3140.00	3000.00	4100.00	4000.00	3000.00	4000.00	4000.00	4600.00	2027.00	2585.00	3170.00	4300.00
Sewage pumping machinery in P.S. B'd Br. R'd n'r Schwarts Pl.	2500.00	4000.00	3000.00	3200.00	3800.00	3000.00	3000.00	2350.00	2085.00	4350.00	2350.00	1350.00
Sewage pumping machinery Washington Ave. & 6th St.	3700.00	3000.00	4100.00	4500.00	4000.00	3500.00	3740.00	3740.00	3795.00	4040.00	3600.00	1350.00
1000 ft. b.m. lumber for foundations	65.00	40.00	50.00	40.00	35.00	50.00	40.00	40.00	50.00	50.00	48.00	35.00
100 lin.ft. piles	1.00	0.50	0.60	0.40	0.50	1.00	0.50	1.50	0.75	0.50	0.80	1.25
1000 ft. b.m. sheathing left in place	58.00	40.00	40.00	30.00	35.00	35.00	30.00	35.00	50.00	30.00	45.00	35.00
700 cu.yd. excavation and embankment	8.70	1.00	0.75	0.75	2.80	2.00	2.00	0.75	1.00	1.00	2.50	0.65
200 cu.yd. extra earth excavation	2.00	0.50	1.75	0.75	2.00	3.00	2.00	1.00	0.75	1.50	3.00	0.75
200 cu.yd. rock excavation	1.50	3.00	0.50	3.00	2.00	3.00	3.50	3.00	3.00	4.00	1.25	3.00
200 cu.yd. earth filling	0.30	1.00	0.25	0.20	0.50	1.00	1.00	0.75	0.35	1.50	0.75	0.75
100 cu.yd. stone or gravel filling	3.00	2.00	2.00	2.25	2.50	2.00	2.00	2.00	1.75	2.50	2.30	2.50
100 cu.yd. additional concrete	6.00	9.00	10.00	7.00	10.00	9.00	8.50	7.00	8.00	10.00	12.00	80.00
1000 lb. additional steel reinforcement	0.05	0.04	0.04	0.04	0.05	0.04	0.05	0.04	0.03	0.05	0.03	0.05
13,000 sq.yd. resurfacing macadam	0.20	0.30	0.50	0.40	0.40	0.40	0.50	0.60	0.69	0.60	0.50	0.50
Extended totals	$101,241	$102,627	$105,746	$113,634	$115,967	$116,775	$130,265	$133,782	$134,793	$137,713	$143,298	$171,722

BUILDINGS

(Continued from page 12.)

St. Johns, Newfoundland—Bids will soon be received for the construction of a building for the Cochrane St. Church, to cost $80,000. Ross & MacDonald, Montreal, Que. are Archs.

Tampico, Mexico—Plans are being prepared by W. E. Nelson, Arch., Brownsville, Tex., for the construction of a six-story, 130x130-ft., brick and concrete office building for the Urguta Estate. Estimated cost, $300,000.

The Buffalo Slag Co., Buffalo, N. Y., announces the removal of its offices to 217 Ellicott Sq.

Balcom & Darrow, Engrs., announce that they have moved from 70 East 45th St., and are now located at 10 East 47th St., New York, N. Y.

The Goulds Mfg. Co., Seneca Falls, N. Y., announces that a branch office was recently opened in the Third National Bank Building, Atlanta, Ga. This office will be in charge of A. B. Tanner.

The Concrete Mixing & Placing Co., 123 W. Madison St., Chicago, which has handled the pneumatic concrete mixer and conveyor in the West, announces that it has extended its business to include the eastern states. H. B. Kirkland is Pres.

Automobile Trade—According to Alfred Reeves, General Manager of the Automobile Chamber of Commerce, 515,000 motor vehicles, valued at $485,000,000, were manufactured in 1914. These were made by 450 companies. It is estimated that there were 1,500,000 automobiles registered in the various states at the end of 1911.

The Koehring Machine Co., Columbus, Ohio, announces that a new office will be opened Jan. 1 by W. W. Williams in the Provident Bank Bldg., Cincinnati, C. O. Owens will be in charge of this office, which will be a branch of the Columbus office, and will handle Koehring mixers, Howard traction rollers, Sternberg trucks, and other lines of allied equipment.

Municipal Improvements—The city of Philadelphia, Penn., will award contracts for municipal work during 1915, amounting to approximately $8,000,000. This is the sum provided for in the tax levy budget recently passed by the City Council. Two important undertakings will be finished next year—the sewer system and the extension of the water works, including a filtration plant. The city will not wait until spring to start the public improvement work. As much as possible will be done during January, February and March to provide work for laborers, inspectors, foremen and others.

Sullivan Drills in St. Louis—Although three separate contractors are driving the 1800-ft. section of the Hill Creek Intersecting Sewer, all of them are using Sullivan air compressors and drills. There are six belt-driven two-stage compressors in use, five having a pressure displacement of 1150 cu.ft. per min. and one of 628 cu.ft. per min. There are 46 rock drills in use, being the Sullivan "FF-12" type, a reciprocating piston machine with a hollow piston, a 1-in. tube and water jet discharging water through hollow steel drill to clear away the cuttings. The drill is 2⅝ in. and it is recalled that this is the size of drill and make which was used on the Mount Royal Tunnel of the Canadian Northern Ry. in Montreal.

The Gallón Iron Works & Manufacturing Co., Galion, Ohio, manufacturer of culvert pipe, road makers' machinery, contractors' and municipal supplies, has made a Christmas presentation of a life insurance policy to each of its employees. These policies are issued through the Group Insurance Department of The Equitable Life Assurance Society of the U. S. and guarantee absolutely, in the event of death from any cause whatsoever, to pay the salaries of such employees to their families each month for an entire year. Mr. D. C. Boyd, Pres. and Gen. Mgr. of the company, when interviewed in connection with this group insurance transaction, said, "We regard every one in our service as an important integral part of our company and of distinct value in carrying our purposes into effect. The officers of the company have the keenest interest in the welfare of each individual connected with us and have taken every possible precaution to surround them with the most modern equipment for their safety and comfort. We know of no other way in which we could more efficiently manifest our concern for our employees than through the protection of their families and it is our hope that these life insurance policies will add something to their feeling of security."

The Composition Floor Manufacturers' Association has been formed to unite all reliable and experienced manufacturers of composition flooring using the "oxychloride of magnesia" process. The main objects are to be the establishment of standards in quality, the publication of specifications for foundations, a publicity campaign truthfully stating the qualities of the material and giving reliable directions for maintenance and care in use. For twenty years promoters have been selling formulas, under patents or trade secrets, for plastic cements which would give an elastic and sanitary flooring. Yet the process of manufacture and the chemical combination is an old one, having first been published by Sorel, a French chemist, in 1866. Calcined magnesite is combined with a solution of chloride of magnesia, giving a stone-like substance known as oxychloride of magnesia. Its peculiarity is that it will combine with organic substances to give a more elastic and resilient flooring than will lime cements. But composition floorings are being made by hundreds of inexperienced manufacturers without attempt at chemical control. Few understand that less than 20% of the material sold in the United States as powdered calcined magnesite is fit for making composition flooring, or that successful manufacturers must know the exact amounts of oxide of magnesium and lime in magnesite and the impurities in the chloride of magnesia. As a result of this situation many composition floorings installed have turned out generally unsatisfactory. The Composition Floor Manufacturers Association invites all manufacturers willing to help in eliminating the present unsatisfactory conditions to join. Applications should be sent to the secretary of the Association, M. J. Traub, 37 West Van Buren Street, Chicago, Ill.

Labor Unions Must Pay Damages

After years of litigation, the Supreme Court of the United States, Jan. 5, held that some two hundred Connecticut labor union members must pay $252,130.09 damages under the Sherman anti-trust law for a nation-wide boycott of D. E. Loewe & Co., Danbury, Conn., hat manufacturers, who refused to unionize their shops. The bank accounts and homes of many of the men already are under attachment to pay the judgment, and the next step probably will be foreclosure.

Leading lawyers of Congress disagreed today on whether this decision meant that union workmen would be liable in the future for damages on account of boycotts. Some hold that the Clayton anti-trust law, passed last year after this suit had been tried, would make another such prosecution impossible.

It was in the Danbury hatters' case that the Supreme Court decided in 1908 that labor unions were subject to the terms of the Sherman anti-trust law, and sent the suit back to the New York Federal courts for trial. The judgment, the largest ever before the court under the Sherman law, as well as the vigorous defense of the union men, attracted widespread attention to the litigation.

The decision of the court was unanimous. Justice Holmes, announcing the decision said:

"It requires more than the blindness of justice, not to see that many branches of the United Hatters and the Federation of Labor, in pursuance of a plan emanating from headquarters, made use of such lists (unfair dealers) and of the primary and secondary boycott in their efforts to subdue the plaintiffs to their demands. The union label was used and a strike of the plaintiffs' employees was ordered and carried out to the same end and the purpose to break up the plaintiffs' commerce affected by the quality of the acts."

This left the controversy, he added, narrowed down to the responsibility of the defendants for what was done by the labor organizations. The defendants were laboring men as a rule not employed by Loewe & Co., but living in nearby towns, and a few were national officials of the hatters' union. On the question of responsibility, the justice said:

"The court in substance instructed the jury that if these members paid their dues and continued to delegate authority to their officers unlawfully to interfere with the plaintiffs' interstate commerce in such circumstances that they knew or ought to have known, and such officers were warranted in the belief that they were acting in the matters within their delegated authority, then such members were jointly liable, and no others. It seems to us, that this instruction sufficiently guarded the defendants' rights, and that the defendants got all that they were entitled to ask in not being held chargeable with knowledge as matter of law."

The damages, which under the law were three-fold the injury suffered, were approved over the objection that some of them accrued since the action began.

Exporters Oppose Ship Purchase Bill

As a result of a canvass just completed by the "American Exporter" of 2447 leading exporters of the country, 559 replies were received, of which 85 expressed approval of the Government ship purchase bill, 20 were in favor under certain conditions, 229 were opposed, while the balance who answered excused themselves from expressing an opinion, because of unfamiliarity with the bill, a desire not to go on record, or because their export shipping is handled for them by others.

The canvass was made by mail beginning December 17, and ending January 4, thus being completed before the debate on the measure began in the Senate. Those asked to express their views were 1196 manufacturers known to be engaged in or seeking export trade, and 1257 export commission houses, manufacturers' export agents, New York buying offices for foreign freight forwarders, and included all members of the American Manufacturers' Export Association, the American Exporters & Importers' Association and a large portion of the Merchants' Association. It included firms in practically every State of the union, and, among manufacturers, makers of everything from toothpicks to locomotives.

None of those invited to express their views were ship owners. The terms shipping and exporting are often confused in discussing oversea trade, hence emphasis is laid on the fact that the views gathered are those of the men who pay the freight and depend on the shipping facilities offered and not those of the owners or agents of ships. Those who were asked to give their views were the very people who would supposedly benefit from the operation of the bill, and their indifference and actual opposition by a vote of more than two to one is considered significant.

As the vote shows, the experience of shippers is that the thirteen lines to South America and the numerous lines to Central America have provided and do provide ample facilities. Nevertheless many who testify to that fact state that they are in favor of the bill. In addition to those who favored the bill, there were those who gave qualified approval to Government competition with private capital and Government ownership. Those qualified answers were in several cases somewhat obscure, in some cases expressing approval purely as a war emergency measure, the Government to withdraw when the emergency was to pass, while others expressed approval provided subsidies cannot be paid.

CONTRACT PRICE

Sewage Collecting System—North Plainfield, N. J. — Bids were received, Dec. 8, by the Borough of North Plainfield for constructing a sewage collecting system (Contract No. 1) from (A) Engineer's Estimate (B) Harrison-Burton Co., New York, N. Y.; (C) John C. Shrade, Inc., Brooklyn, N. Y.; (D) H. C. Brooks Co., Martinsburg, W. Va.; (E) Frank Puglia, Paterson, N. J.; (F) D. Donnegan Co. and F. N. Lewis, Brooklyn, N. Y.; (G) Cantrell Construction Co., Philadelphia, Penn.; (H) Peekskill Construction Co., Peekskill, N. Y.; (I) Cauldwell-Wingate Co. and Atlantic Construction & Supply Co., New York, N. Y.; (J) Burke & Bonham, Inc., Plainfield, N. J.; (K) Joseph L. Sigretto & Co., Woodhaven, N. Y.; (L) Kelly-McFeeley Co., Camden, N. J.; (M) Bruno Pizzimenti, Seneca Falls, N. Y.; (N) Fusco Construction Co., Newark, N. J.; (O) Schneider Stelle & Co., New Brunswick, N. J.; (P) Joseph Johnson's Sons, West New Brighton, N. Y.; (Q) Weldon Contracting Co., Rahway, N. J.; (R) Cenedella & Co., Milford, Mass.; (S) Pasquale Mauriella, Orange, N. J., A. D. Ambrosio & Co., Hartford, Conn. The item bids were as follows:

CONTRACT 1

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
200 lin.ft. 8-in. vitrified pipe sewers, 0-6 ft. deep	$0.47	$0.44	$0.40	$0.45	$0.45	$0.46	$0.41	$0.47	$0.40	$0.56	$0.70	$0.53	$0.35	$0.50	$0.42	$0.50	$0.54	$0.60	$0.76
10,000 lin.ft. 8-in. vitrified pipe sewers, 6-8 ft. deep	0.59	0.44	0.47	0.45	0.50	0.50	0.50	0.57	0.48	0.76	0.70	0.68	0.43	0.52	0.45	0.58	0.65	0.75	0.92
4000 lin.ft. 8-in. vitrified pipe sewers, 8-10 ft. deep	0.73	0.57	0.59	0.65	0.80	0.60	0.73	0.79	0.70	0.89	0.85	0.96	0.65	0.67	0.63	0.80	0.78	1.10	1.60
1000 lin.ft. 8-in. vitrified pipe sewers, 10-12 ft. deep	0.92	0.82	0.85	0.85	1.00	0.90	0.92	1.10	1.06	1.15	1.15	1.20	0.95	0.90	0.94	1.15	1.10	1.50	1.74
100 lin.ft. 8-in. vitrified pipe sewers, 12-14 ft. deep	1.17	1.40	0.97	1.35	1.30	0.96	1.33	1.40	1.25	1.37	1.25	2.02	1.45	1.25	1.94	1.45	1.50	2.25	1.94
100 lin.ft. 8-in. vitrified pipe sewers, 14-16 ft. deep	1.47	2.00	1.50	1.85	1.75	1.06	1.67	1.74	1.67	1.60	1.50	2.47	2.05	1.40	2.24	2.02	2.00	2.75	2.19
100 lin.ft. 15-in. vitrified pipe sewers, 0-6 ft. deep	0.94	0.89	0.77	1.00	0.80	0.90	0.91	1.03	0.79	0.96	1.15	0.94	0.80	1.00	0.79	1.02	1.25	1.00	1.50
100 lin.ft. 15-in. vitrified pipe sewers, 6-8 ft. deep	1.07	0.95	0.85	1.15	0.85	1.00	1.04	1.17	0.95	1.20	1.25	1.00	1.25	1.15	1.05	1.17	1.50	1.25	1.55
200 lin.ft. 15-in. vitrified pipe sewers, 8-10 ft. deep	1.25	1.05	1.05	1.40	1.25	1.20	1.35	1.46	1.25	1.46	1.50	1.42	1.65	1.35	1.57	1.44	1.60	2.00	1.65
600 lin.ft. 15-in. vitrified pipe sewers, 10-12 ft. deep	1.49	1.15	1.30	1.60	1.65	1.30	1.57	1.80	1.45	1.75	1.60	1.72	2.00	1.50	1.77	1.80	2.00	2.35	1.85
800 lin.ft. 15-in. vitrified pipe sewers, 12-14 ft. deep	1.79	1.40	1.45	1.90	1.90	1.50	2.00	2.03	1.75	2.05	1.75	2.58	2.65	1.80	2.17	2.50	2.50	2.85	2.30
900 lin.ft. 15-in. vitrified pipe sewers, 14-16 ft. deep	2.15	2.00	2.00	2.25	2.15	1.80	2.17	2.36	2.20	2.37	2.25	3.06	3.40	2.25	2.39	2.75	3.00	3.40	2.80
300 lin.ft. 15-in. vitrified pipe sewers, 16-18 ft. deep	2.59	2.50	2.60	2.75	2.50	2.25	3.00	2.82	2.75	2.71	2.40	3.36	4.25	3.00	3.23	3.20	3.50	4.10	2.95
200 lin.ft. 15-in. vitrified pipe sewers, 18-20 ft. deep	3.10	3.00	3.00	3.35	3.25	2.50	3.90	3.30	3.50	3.11	3.00	3.90	5.15	4.00	4.22	4.00	3.80	4.90	3.75
100 lin.ft. 15-in. vitrified pipe sewers, 20-22 ft. deep	3.70	4.00	3.50	4.40	4.00	2.50	5.08	3.92	4.00	3.60	3.75	4.48	5.85	5.00	6.20	4.75	4.00	5.50	4.75
150 lin.ft. 24-in. vitrified pipe sewers, 0-6 ft. deep	2.00	1.48	1.60	1.80	1.65	1.55	1.72	1.75	1.60	1.74	1.79	1.82	1.75	1.47	1.82	1.90	2.00	1.75	2.45
200 lin.ft. 24-in. vitrified pipe sewers, 6-8 ft. deep	2.17	1.58	1.75	1.95	1.75	1.75	1.89	1.90	1.80	2.03	2.25	2.02	1.95	1.77	1.97	2.05	2.25	1.75	2.65
500 lin.ft. 24-in. vitrified pipe sewers, 8-10 ft. deep	2.39	1.68	1.90	2.15	1.90	2.00	2.09	2.26	2.20	2.38	2.60	2.37	2.30	2.00	2.44	2.21	2.53	1.75	2.70
900 lin.ft. 24-in. vitrified pipe sewers, 10-12 ft. deep	2.68	1.88	2.20	2.35	2.25	2.50	2.25	2.60	2.60	2.73	3.00	2.73	2.65	2.30	2.84	2.56	3.20	2.00	2.80
1300 lin.ft. 24-in. vitrified pipe sewers, 12-14 ft. deep	3.05	2.10	2.40	2.65	2.50	2.70	2.97	2.88	3.00	3.12	3.25	3.46	3.35	2.87	3.24	3.05	3.45	3.00	3.35
1900 lin.ft. 24-in. vitrified pipe sewers, 14-16 ft. deep	3.42	2.50	2.90	3.05	2.85	3.00	3.30	3.21	3.50	3.50	3.60	3.86	4.35	3.25	3.84	3.40	3.95	4.00	3.45
2700 lin.ft. 24-in. vitrified pipe sewers, 16-18 ft. deep	4.05	3.00	3.50	3.60	3.25	3.50	3.50	3.72	4.00	3.92	4.00	4.46	5.15	4.35	5.00	4.25	4.40	5.00	4.25
1700 lin.ft. 24-in. vitrified pipe sewers, 18-20 ft. deep	4.67	3.50	3.95	4.20	4.00	3.50	4.65	4.17	4.75	4.37	4.50	5.04	6.10	5.87	7.50	4.60	4.90	5.50	4.60
100 lin.ft. 24-in. vitrified pipe sewers, 20-22 ft. deep	5.40	4.00	4.70	5.15	5.00	3.50	5.50	4.74	5.50	4.85	5.50	5.67	7.05	7.00	10.00	5.00	5.58	5.50	5.50
600 5-in. Y branches on 8-in. pipe	0.60	0.40	0.30	0.45	0.40	0.22	0.50	0.56	0.25	0.40	0.40	0.35	0.40	1.00	0.48	0.50	0.70	0.40	1.75
100 5-in. Y-branches on 15-in. pipe	0.98	0.85	0.90	1.10	1.50	0.65	1.30	1.12	0.70	1.00	1.30	1.02	1.00	1.50	1.26	1.50	1.50	0.75	2.50
250 5-in. Y-branches on 24-in. pipe	2.01	2.10	2.00	2.75	3.00	1.68	3.00	2.24	2.00	1.50	3.40	2.29	2.00	3.00	3.50	3.75	3.25	2.00	3.95
800 5-in. ⅛-bends	0.36	0.25	0.20	0.30	0.40	0.14	0.35	0.45	0.22	0.40	0.25	0.35	0.20	0.50	0.24	0.35	0.30	0.40	0.50
350 5-in. Y-branches	0.61	0.35	0.40	0.75	0.75	0.25	0.50	0.73	0.30	0.70	0.30	0.65	0.40	0.50	0.47	0.45	0.30	0.60	0.75
2000 lin.ft. 5-in. vitrified pipe risers	0.76	0.75	0.60	0.50	0.85	1.00	0.55	0.34	0.70	0.60	0.80	0.81	0.75	1.00	0.60	0.75	0.70	0.60	0.70
5000 lin.ft. 5-in. house connections	0.46	0.40	0.40	0.45	0.30	0.60	0.40	0.50	0.55	0.40	0.40	0.49	0.35	0.42	0.50	0.65	0.35	0.65	0.58
1700 lin.ft. laying 6-in. c.i. force main	0.32	0.30	0.30	0.35	0.35	0.35	0.38	0.67	0.29	0.45	0.60	0.30	0.30	0.50	0.28	0.90	0.40	0.45	0.95
720 lin.ft. laying 24-in. c.i. pipe line in balustrade	0.82	0.50	0.65	1.00	0.85	1.00	0.92	0.95	0.50	1.00	2.00	1.16	1.25	1.75	0.86	7.00	0.70	1.75	2.00
500 lin.ft. laying 24-in. c.i. pipe line 0-6 ft. deep	1.15	0.75	0.95	1.25	0.85	1.00	1.14	1.40	0.75	1.00	2.00	1.04	1.75	1.75	0.97	5.00	1.10	1.75	2.89
700 lin.ft. ¼-in. galvanized-iron pipe line	0.25	0.25	0.20	0.25	0.35	0.20	0.34	0.45	0.25	0.25	0.30	0.24	0.30	0.30	0.15	0.25	0.30	0.50	0.10
160 tons c.i. pipe	23.00	22.50	22.00	22.50	30.00	22.00	23.50	40.00	22.00	24.00	25.00	20.70	22.00	25.00	23.00	24.00	24.00	25.00	27.00
5 tons c.i. specials	55.00	57.00	60.00	60.00	75.00	55.00	72.00	90.00	58.00	65.00	65.00	55.00	55.00	50.00	60.00	65.00	80.00	80.00	90.00
85 manholes	55.00	60.00	45.00	54.00	48.00	65.00	70.00	45.00	70.00	40.00	45.00	49.16	50.00	60.00	45.00	44.00	52.00	70.00	45.00
17 flushtanks	70.00	65.00	90.00	70.00	85.00	75.00	80.00	84.00	81.00	75.00	75.00	80.85	75.00	100.00	70.00	88.00	80.00	100.00	100.00
Sewage pumping station, West End Ave. near Green Brook	2793.00	1839.00	4200.00	2860.00	2900.00	4750.00	2656.00	2400.00	3100.00	3000.00	2000.00	2941.00	2900.00	3800.00	3500.00	3000.00	3700.00	2500.00	5000.00
Machinery in sewage pumping station (lump sum)	2960.00	3740.00	3200.00	3740.00	3700.00	4500.00	3960.00	3900.00	4000.00	3500.00	3800.00	3633.00	3700.00	4700.00	3400.00	3750.00	3600.00	3900.00	4000.00
1000 ft. b.m. lumber for foundations	45.00	30.00	40.00	40.00	65.00	30.00	50.00	45.00	50.00	40.00	40.00	50.00	50.00	50.00	48.00	40.00	50.00	65.00	45.00
200 lin.ft. piles	0.50	0.30	0.50	0.50	1.00	0.50	1.50	0.90	0.40	0.70	0.50	1.00	1.00	0.50	0.80	0.40	1.00	0.50	10.25
10,000 ft. b.m. sheathing left in place	35.00	30.00	20.00	30.00	45.00	20.00	25.00	28.00	35.00	35.00	30.00	50.00	40.00	50.00	35.00	30.00	40.00	35.00	45.00
500 cu.yd. excavation and embankment	1.00	0.70	1.00	2.00	3.00	1.00	2.50	0.95	1.75	1.00	0.60	1.00	1.50	0.60	1.50	0.75	0.50	1.00	0.75
100 cu.yd. extra earth excavation	0.60	1.50	1.00	1.00	2.00	0.50	1.00	0.56	0.60	0.60	0.90	0.80	2.00	0.60	1.50	0.75	2.00	1.60	0.75
100 cu.yd. rock excavation	3.00	2.00	3.00	1.50	2.50	3.00	2.50	2.80	4.00	3.00	3.00	3.50	1.50	1.00	2.50	2.50	3.50	1.00	4.00
1000 cu.yd. earth filling	1.00	0.60	0.30	0.50	0.40	0.50	0.40	0.65	0.60	0.25	0.30	0.50	1.00	1.00	0.75	0.60	1.00	0.60	0.75
50 cu.yd. stone and gravel filling	2.00	2.00	2.00	2.00	3.00	1.00	2.30	1.15	2.75	1.00	2.50	1.25	2.00	2.00	2.75	2.20	1.00	2.50	2.00
200 cu.yd. concrete	9.00	7.00	6.50	6.00	7.00	6.00	6.00	7.25	7.00	10.00	5.50	8.50	8.00	10.00	8.00	7.00	8.00	7.00	7.85
260 cu.yd. concrete balustrade	20.00	17.50	7.50	8.00	8.00	6.50	9.50	11.00	9.00	12.00	14.00	12.00	10.00	12.00	15.00	12.00	9.00	9.00	20.00
8000 lb. steel reinforcement	0.04	0.04	0.03	0.04	0.05	0.025	0.03	0.05	0.04	0.03	0.025	0.03	0.05	0.05	0.03	0.04	0.04½	0.05	0.08
11,700 sq.yd. resurfacing macadam	0.30	0.35	0.20	0.21	0.20	0.30	0.40	0.34	0.50	0.40	0.30	0.30	0.25	0.37	0.30	0.35	0.30	0.35	0.60
Extended totals	$86,819	$72,598	$72,772	$77,322	$78,102	$78,788	$84,314	$85,924	$86,899	$87,073	$87,393	$92,309	$93,042	$93,148	$94,314	$95,954	$98,300	$100,012	$111,792

Contracts to Be Let

Bids received until Jan. 21, 1915.

Building at State Hospital

Binghamton, N. Y.

Sealed proposals for Construction, Heating, Plumbing and Electric work for new building for Chronic Patients; for New Boiler, Stack, etc., at the Binghamton State Hospital, Binghamton, N. Y., will be received by the State Hospital Commission, Capitol, Albany, N. Y., until two-thirty p.m., Jan. 21st, 1915, when they will be publicly opened and read. Proposals shall be enclosed in an envelope furnished by the State Architect, sealed and endorsed, and shall be accompanied by a certified check in the sum of 5% of the amount of bid for Construction work; in the sum of $1250 for Heating work; in the sum of $500 for Plumbing work; in the sum of $250 for Electric work, and in the sum of 5% of the amount of bid for New Boiler, Stack, etc. The contractors to whom awards are made will be required to furnish surety company bond in the sum of 50% of the amount of contract within thirty (30) days after official notice of award of contract, and in accordance with the terms of Specifications Nos. 2100, 2114, 2115, 2116 and 2191. The right is reserved to reject any or all bids. Drawings and specifications may be consulted at the Binghamton State Hospital, at the New York Office of the Department of Architecture, Room 1224, Woolworth Building, and at the Department of Architecture, Capitol, Albany, N. Y. Drawings and specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice, and upon the desposit of certified check in the sum of $10.00 made payable to the State of New York, for each division of the work, which check will be returned if plans and specifications are sent back in good condition to the State Architect, Lewis F. Pilcher.

Dated Albany, N. Y., December 23, 1914.

LEWIS M. FARRINGTON,
Assistant Secretary.

Bids received until Jan. 12, 1915.

Cottages, etc. at Training School

Yorktown Heights, N. Y.

Sealed proposals for Construction, Heating, Plumbing and Electric work for Seven Cottages; for Construction work of Power House and Coal Pocket (this does not include boiler plant, plumbing or electric work) and for Water Supply System, for the New York State Training School for Boys, Yorktown Heights, N. Y., will be received by Mr. William B. Osgood Field, President of the Board of Managers of the New York State Training School for Boys, at the Department of Architecture, Room 1224, Woolworth Bldg., New York City, until Tuesday, January 12, 1915, at noon, when they will be publicly opened and read. Proposals shall be enclosed in an envelope furnished by the State Architect, sealed and endorsed, and shall be accompanied by certified check in the sum of 5% of the amount of bid for Construction, Heating and Plumbing work; in the sum of $150 for Electric work; in the sum of $1500 for Power House and Coal Pocket, and in the sum of $450 for Water Supply System. The contractors to whom awards are made will be required to furnish surety company bond in the sum of 50% of the amount of contract within thirty (30) days after official notice of award of contract, and in accordance with the terms of specifications Nos. 2098, 2192, 2193, 2194, 2099 and 2107. The right is reserved to reject any or all bids. Drawings and specifications may be consulted at the New York office of the Department of Architecture, Room No. 1224, Woolworth Building; at the Department of Architecture, Capitol, Albany, N. Y. Drawings and specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, upon reasonable notice and upon the deposit of certified check in the sum of $10 made payable to the State of New York, for each division of the work, which check will be returned if plans and specifications are sent back in good condition to the State Architect, Lewis F. Pilcher.

Bids received until Jan. 20, 1915.

Dredging in the Harbor of Baltimore

DEPARTMENT OF PUBLIC IMPROVEMENTS.
SUB-DEPARTMENT: HARBOR BOARD.

Baltimore, Md.

PROPOSALS FOR DREDGING THE MAIN CHANNEL NORTH FROM LAZARETTO LIGHT TO THE PIERS OF THE TRANSATLANTIC LINERS, all as shown on plans, will be received until 11 o'clock forenoon of Wednesday, January 20th, 1915.

Proposals must be addressed to the Board of Awards and sent to the City Register's Office, City Hall, accompanied by a certified check of the bidder for $2,000.00 drawn on a Clearing House Bank and payable to the Mayor and City Council of Baltimore.

The right is reserved to reject any or all proposals. Bond in the amount of the contract price will be required for the proper performance of the contract.

Approximate quantity of material to be dredged is 2,000,000 cubic yards.

Approved: O. F. LACKEY,
JOHN HUBERT, Harbor Engineer.
Acting President, Board of Awards.

Plans and specifications can be obtained at the office of the Harbor Engineer, City Hall, Baltimore, Md.

Bids received until Jan. 19, 1915.

Earth Levee

Augusta, Ga.

SEALED PROPOSALS, addressed to the City Council of Augusta, Georgia, will be received by the River and Canal Commission at its office, 747 Broad Street, Augusta, Georgia, at 12 o'clock Tuesday, January 19th, for furnishing all labor and outfit and constructing section No. 4 of the earth levee at Augusta, Georgia, requiring 250,000 cubic yards of earth fill and 30,000 cubic yards of excavation. This will be scraper or wagon work.

Also at the same time and place bids will be received for the construction of:

960 lineal feet of reinforced concrete box sewer 7 feet by four and one-half feet.
420 lineal feet of 48-inch brick sewer.
530 lineal feet of 42-inch brick sewer.
760 lineal feet of 36-inch brick sewer.
330 lineal feet of 24-inch pipe sewer.

Certified check for $300.00 will be required with each bid.

The City reserves the right to reject any and all bids.

A bond will be required from the successful bidder.

Plans and specifications can be had on application to the undersigned.

NISBET WINGFIELD, Chief Engineer,
747 Broad St., Augusta, Ga.

DEPARTMENT OF THE INTERIOR, U. S. RECLAMATION SERVICE, Washington, D. C., December 31, 1914.—Sealed proposals will be received at the office of the U. S. Reclamation Service at Provo, Utah, until 2 o'clock P. M., February 3, 1915, for construction involving 158,000 yards of excavation, 7,000 yards of concrete and other items. The work is located near Payson City, Utah, near the San Pedro, Los Angeles and Salt Lake R.R. and the Tintic Branch of the Denver and Rio Grande R.R. For particulars, address United States Reclamation Service, Provo, Utah, or Washington, D. C. A. P. DAVIS, Director and Chief Engineer.

TREASURY DEPARTMENT, Supervising Architect's Office, Washington, D. C., January 2, 1915.—SEALED PROPOSALS will be opened in this office at 3 p.m., March 6, 1915, for the construction complete (including mechanical equipment, except elevator and approaches) of the United States Post Office and Court House at Lawton, Oklahoma. Three story and basement building; ground-area, 6,700 square feet; fireproof construction; stone and brick facing; tin roof. Drawings and specifications may be obtained after January 23, 1915, from the Custodian of site at Lawton, Oklahoma, or at this office, in the discretion of the Supervising Architect. O. WENDEROTH, Supervising Architect.